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The ²⁶ American Perfumer

and Essential Oil Review

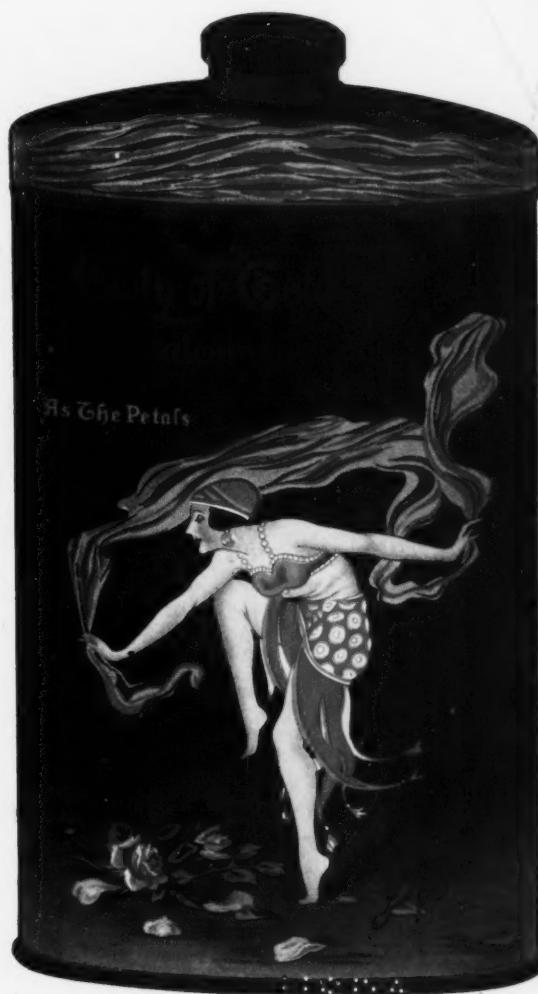
PERFUMER PUBLISHING CO.

MARCH 1918

80 MAIDEN LANE, NEW YORK

VOL.XIII
NO.1

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(SEE PAGE 9)

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ONE DOLLAR A YEAR.
TEN CENTS A COPY.

NEW YORK, MARCH, 1918.

Vol. XIII. No. 1.

THE AMERICAN PERFUMER

and ESSENTIAL OIL REVIEW

PUBLISHED MONTHLY.

PERFUMER PUBLISHING COMPANY
80 Maiden Lane.

LOUIS SPENCER LEVY, President and Treasurer. 80 Maiden Lane
EDWARD W. DREW, Secretary New York

TERMS OF SUBSCRIPTION

| | |
|--|----------------|
| The United States and Possessions, | \$ 1.00 A Year |
| Canada and Mexico, | 1.50 " " |
| Foreign, | 2.00 " " |

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OUR REPORT FROM WASHINGTON.

Questions of taxation seems to be resting quietly for a few days at the National Capitol, but the ever present non-essential problem continually crops to the surface. It is becoming more and more evident that study of the subject is leading to the point where the trades in which our readers are interested will have less to fear than seemed probable when the topic first was broached. The men in power are awakening to the fact that really there is now no unessential industry. Through all of the controversy there also runs the echo of the words of President Wilson: "Let business proceed as usual." While this may not be accomplished literally those in control of war affairs seem anxious to come as closely as possible to making the edict effective.

The passage of the Daylight Saving Law, which moves the clocks of the Nation up one hour for the seven months beginning March 31, is of comparatively little importance in a practical way to our industries.

Our correspondent's letter follows:

WASHINGTON, March 16.—American industry must be prepared to make sacrifices to win the war, in the opinion of George N. Peek, Industrial Representative of the War Industries Board, Council of National Defense. In response to a request from Waddill Catchings, chairman of the War Executive Committee of the United States Chamber of Commerce, Mr. Peek has issued a statement of his own views and those of various associates in the government service, on the subject of "Industry in War Time—Essentials and Non-Essentials." While the statement is distinctly unofficial, yet it is the latest word from government sources on this subject that is all-important to business men in all lines. The statement in part is as follows:

"Industrially, the first problem of the Government is to secure the necessary supplies for the conduct of the war without too seriously interfering with the production of necessities for the public welfare. The second problem is to insure continuance of our industrial strength after the war.

"Shortages of many classes of raw materials and of labor in different lines are evident. Transportation, both water and rail, is obviously short, and the need of industrial readjustment is apparent to make room for the war requirements of our Government and our Allies.

"These problems may be solved by making provision for the entire requirements of the Government in such a manner as to utilize to the fullest extent present productive capacity. In many cases, the facilities of less essential industries should be converted to essential production.

"The discussion of the 'limitation of non-essential in-

dustries' started with a very unfortunate misuse of words. The idea, as exploited in the newspapers, that the Government intended to cut off non-essential industries, had in it possibilities for disaster.

"All industries are closely inter-related. For instance, certain so-called 'non-essentials' may be sent to South America to pay for commodities absolutely needed for essential products and no large class can be arbitrarily cut off without seriously affecting general business conditions in the country. Certainly no industry is 'non-essential' to the workmen and capital employed therein, and when one considers that over ten million people and thirty billion dollars of capital are employed by 'non-war' industries, the need of caution in dealing with this problem is manifest.

"On the other hand, our industrial equipment is limited. We do not have materials, machinery, transportation, labor or capital sufficient for fighting the great war and for normal business at the same time. The war must be prosecuted to the utmost and business must shrink to provide the necessary equipment with the least possible injury to the business of the country.

"The first consideration of the Nation and all of its industries must be to contribute the utmost toward winning the war, and to that end business must, where necessary, be diverted from its established channels into new channels; or if absolutely necessary, the flow must, during the war, be entirely stopped in order to provide adequate labor and material for war needs. It does not, however, follow that there will be *less business than usual*, but rather *more unusual business*.

"If the so-called 'non-essential' industries are 'cut off' many of them would be ruined and others permanently crippled.

"The Fuel Administration has worked out a plan which provides, in part at least, for necessary restrictions with the least possible injury to industries. This plan provides for fuel curtailment by the following steps:

"1. *Voluntary agreement* by each non-war industry to limit the least essential parts of its product—each industry making the reduction where it will do the least harm.

"2. *Formal order* from Fuel Administrator making legal and binding on the entire industry the various restrictions voluntarily agreed upon.

"The above plan has already been tried out enough to prove its practicability. In each case the industry has given its heartiest support and shown its desire to co-operate with the Government in every possible manner.

"The Commercial Economy Board of the Council of National Defense has undertaken to co-operate with business men in eliminating, as the Government's requirements demand, needless uses of men, materials, equipment, and capital in all lines of commercial business; in other words, to conserve commercial resources as necessary to meet the Government's need.

"The Board's policy is to work forehandedly. It investigates forthcoming supplies and demands, to see where shortage is threatened; then introduces such economies as will prevent the shortage, or keep it from becoming needlessly acute.

"Co-operation of business men with the Board is voluntary. The Board can not compel adherence to its recommendations by legal process. In fact, its purpose is to make such compulsion unnecessary. It works on the theory that there are considerable needless uses of labor, materials, equipment, and capital in all businesses, and that by forehandedly action and with voluntary co-operation from business men enough of these uses can in most cases be eliminated to meet Government requirements without resorting to more drastic methods.

"Of course, there are certain commercial and industrial resources which can not be handled adequately for the Government's purpose in this way. In urgent cases these resources must be diverted quickly from the less essential to the more essential uses, in whatever manner seems most effective. But in most instances, at least for the present, the voluntary methods described would seem to be sufficient.

"The Board is now carrying on campaigns for conservation in several industries, including the manufacture and

COMMANDER THE IDLE!

(From the *New York Evening World*.)

The latest scheme for robbing Peter to pay Paul—paralyzing one part of American industry to favor another—takes the form of a proposal to shut down so-called less essential industries for fifteen days in order to free labor for the farms.

This recommendation, made by Assistant Secretary of Agriculture Onsley to the Senate Agricultural Committee, involves the now familiar but dangerous assumption that it is safe to take any industry by the throat and choke it provided somebody labels it "non-essential."

Why should it be the willing and industrious who are to be thrown out of work or driven to new jobs, while thousands of able-bodied idlers are left undisturbed to eat and loaf at other people's expense?

Take this question of farm labor. Go into the average rural community and see what percentage of loafers a little combing of the town will yield. Add these to a round-up of unwilling workers from the nearest city and note what a substantial draft it makes for local farm needs. Multiply for the entire country.

While this vast army of the idle stays idle, is it just, whenever there is a call for labor from any quarter, to talk glibly of shutting up non-essential industries and throwing out the wage-earners in those industries?

Far safer to start out with the proposition that there are no non-essential industries in the United States until every ounce of man power now going to waste has been commanded and applied.

New Jersey with its Anti-Loafing Act is far nearer the right idea than are Federal Administrators whose one way out of every difficulty is: Shut down industries.

distribution of wool and woolen clothing, leather and shoes, and paint and varnish, and in the service of wholesale and retail stores. The Board is also making preliminary studies of other commodities in which, because of shipping or other conditions, there is a possibility of shortage.

The War Industries Board has been reorganized with Bernard M. Baruch as its chairman. He and the board have been vested with much greater powers over the industries of the country by order of the President.

Judge Robert S. Lovett has been transferred from the position of director of priority under the War Industries Board to a position of special importance in the railroad administration, and it is reported that high Government officials are planning the creation of a joint board of priorities to determine priority in industry, transportation, etc. The board would include representatives of the War Industries Board and Council of National Defense, the Railroad Administration, the Shipping Board, the Treasury Department, the War and Navy Departments, the Food and Fuel Administrations, etc.

LICENSING OF IMPORTS AND EXPORTS.

Under a proclamation of the President, all imports and exports require license by the War Trade Board. This proclamation perhaps does not particularly injure the perfumery and related trades, as the materials and products of these trades are not so bulky as to exclude them from the use of shipping tonnage generally speaking at this time.

E. F. Gay, head of the division of planning and statistics of the Shipping Board and representative of the Shipping Board upon the War Trade Board, says:

"This country must understand that there will be tonnage room only for vital needs. 'Necessary' isn't a strong

enough word. We will take every means possible to avoid unexpected upsets to business, but no lists of materials for which licenses will not be issued can be announced as conditions will be altogether too flexible.

"England is playing the game on the square. Before the war her imports amounted to 54,000,000 tons a year. In 1916 they were cut to 43,000,000 tons, and this year they will be cut to 26,000,000. They consist almost entirely of war materials.

"That's why I say England has stripped to the skin—and America must at least shed her coat. We hear frequent complaints that there is profiteering in Great Britain. There may be individual cases there, as in every other country, but they are isolated cases.

"It is complained that England is exporting luxuries, such as clothes. But she must make some effort to maintain a trade balance, for if English credit goes, the Allies are gone. So the English are exporting goods which take up the smallest tonnage possible and yet net the largest financial returns."

Just how much imports must be cut has not yet been determined. The estimate that at least 50 per cent. must go, Mr. Gay said, was "just a guess."

"The great bulk of needed tonnage," he said, "must be furnished by thinning down the trade in allied-owned bottoms. The neutral shipping problem is most complicated. The thing for Americans to think about now is not what the other fellow can furnish, but what we can furnish. And to this end, the conception of 'necessities' in this country will change greatly as the great war goes on."

PLANNING REVISION OF THE TAX LAWS.

Revision of the tax laws is said to be planned by the President and his advisers, so that they will be simpler and less confusing. At present, it is pointed out, there are several different income, corporation and excess profits tax laws, overlapping each other and confusing the business interests and other tax payers of the country. It is suggested in some quarters that these laws be harmonized and welded into one.

However, revenue legislation will probably not be undertaken for several weeks or perhaps months. Representative Kitchin of North Carolina, chairman of the Ways and Means Committee of the House of Representatives, is said to favor waiting until about the end of the fiscal year June 30. There is a general disposition to wait at least until after the tax returns are in next month, so that there will be some definite idea of the revenue on hand and in sight, and therefore of the prospective needs of the Government. Some leading politicians are in favor of postponing revenue legislation until next winter, for fear of its bad effect upon the autumn election if undertaken at this session of congress.

Whenever it is taken up, look out for squalls! One cannot help hearing talk about possible increases in taxes all along the line, including the products of the perfumery and related industries. However, there is no definite information yet available on this subject.

ENTERING OUR THIRTEENTH YEAR.

With this issue, THE AMERICAN PERFUMER AND ESSENTIAL OIL REVIEW enters upon its thirteenth volume. In the year just ended this journal has been enlarged and otherwise improved, a fact which our readers have been quick to appreciate. For the new volume we shall continue the same policy of progressiveness, with the constant effort of giving the best of service in every direction to our subscribers and advertisers.

BRITISH TRADE REGULATIONS.

We now have on file in this office copies of the *Supplement to the British Board of Trade Journal*, which contains a complete list of trade prohibitions issued by the British Government. We also have files of the *Journal*. Our readers are invited to consult these publications should their business require any information it contains.

FALSE STATEMENTS ABOUT COSMETICS.

Fresh and official denial is now made of the sensational statements palmed off on the public through the publication of the "Safety in the Household" item in Circular No. 75 of the Bureau of Standards. This article was full of misleading statements regarding the dangers of using face powders and hair dyes. We have received under date of February 20 the following from the Chief Clerk of the Bureau of Chemistry at Washington:

"You are informed that this bureau has made no investigations relative to the harmful effects of cosmetics and toilet preparations, and therefore has issued no publications on the subject."

The Chief Clerk calls attention to the fact that unless medicinal claims are made for products of this nature they do not come within the provisions of the Federal Food and Drugs Act, and consequently are not amenable to investigation by the Bureau of Chemistry.

So this famous Circular No. 75, so far as it treated of cosmetics, is left without a leg on which to stand. It is a pity that the Bureau of Standards should have been misled into publishing such matter. Although wholly from irresponsible sources, it received some undeserved credence and manufacturers who protested were treated as if they really were offenders. Such episodes do much harm and ought not to happen.

NO PRICE FIXING UNDER A PATENT.

A decision has been handed down by the United States Supreme Court adverse to the practice of allowing owners of patented articles to fix the price at which they may be sold to consumers. This was the case of the Boston Store of Chicago versus the American & Columbia Graphophone companies. The Boston store disregarded the terms of its contract with the Columbia company for maintenance of price. The court decided that the question before it was no longer open to dispute, as it had been previously passed upon by that court. The court says:

"Applying the cases reviewed there can be no doubt that the alleged price fixing contract disclosed in the certificates was contrary to the general law and void. There can be equally no doubt that the power to make it in derogation of the general law was not within the monopoly conferred by the patent law and that the attempt to enforce its apparent obligations under the guise of a patent infringement was not embraced within the remedies given for the protection of the rights which the patent law conferred."

In the case the court says the recited facts do not disclose that some right or privilege granted by the patent laws has been violated and denies that a patentee in connection with the act of delivering his patented article to another for consideration lawfully reserved by contract a part of his monopoly right to sell.

FRANCE'S AFTER-WAR TRADE.

France is preparing in a concrete way to switch her pre-war German trade to America. Under the authorization of the French Government, the largest publicity and advertising corporation in Europe will try to interest American manufacturers in the great after-the-war market of France. One of the heads of this organization told a Paris correspondent that American

producers would be asked to investigate French markets of every description.

"France is now looking forward," he declared. "Frenchmen realize that the country must have a big market immediately after the war where they can begin to stock up their more or less depleted stores. There will be no tendency to trade again with Germany. The French market, then, to a large degree will be the United States. American manufacturers hitherto have shown no great tendency to drum up trade in France. They took what came their way and let it go at that. Now we are going to try and interest them. France's 40,000,000 people, statistics show, have a purchasing power of 60,000,000. That argument surely ought to appeal to the Americans."

A bureau to be established in New York will systematically distribute information and will not only give full reports on economic conditions in France, but organize the distribution of American goods.

THE THIRD LIBERTY LOAN.

The campaign for the Third Liberty Loan will be opened on April 6, the anniversary of the declaration of a state of war between the United States and Germany. The amount, terms and conditions of the loan are dependent upon further legislation and will be announced as soon as Congress has granted the necessary powers.

Secretary McAdoo chose April 6 as the day to open the campaign as the most fitting date to call for a patriotic response to the summons to duty to every American, to ask from the people at home the same fervent patriotism that actuates our gallant sons on the battlefields of France and on the waters of the Atlantic.

BUY WAR STAMPS.

If the American people are really in earnest about winning the war they will cultivate what Mr. Basil P. Blackett, of the British Treasury, has called the "war-savings atmosphere," and when they are not investing in Liberty Bonds they will buy War-Savings Stamps and Thrift Stamps. To do either or both, according to one's means, is not possible in the case of most people without some self-denial.

No man or woman who has acquired a Liberty Bond is relieved from the duty of buying War-Savings Stamps and Thrift Stamps. Indeed, if they own a Liberty Bond, it should be a reproach not to be able to show an accumulation of stamps. To leave the stamps plan of lending money to the Government to those of narrow means and to the young people is to be careless of the cause of America and her allies. Loose change for the stamps when a bond can be bought with dollar bills set aside for the purpose—that should be the rule.

Does the average man or woman who earns a substantial salary or good wages have any idea of the sacrifices made by the small investors in Thrift Stamps to do their "bit" in the war? It is often a story of silent heroism. If those in fairly easy circumstances emulated the very poor whose souls are filled with unyielding resolution to do their share to win the war, what a boom there would be in the Government's receipts from sales of War-Savings Certificates, War Stamps, and Thrift Stamps!

Cultivate the "war-savings atmosphere," organize clubs to buy the stamps, or be a contributing member. Let no

FOR A CRISP \$5 BILL.

SING a song of Thrift Stamps
Sixteen in a row.
Take them to an agent;
Add fourteen cents or so.
Change them for a War Stamp,
And for your loyalty
You'll get a crisp \$5 bill
in 1923.

man or woman poorer than yourself make a greater sacrifice to help the Government to obtain material and service in the prosecution of the war. There is scarcely any one who cannot forego something that costs money. Lend it to Uncle Sam and he will return it to you with 4 per cent. interest.

For their respective first three months the American War-Savings Campaign is running ahead of the English campaign. America is pouring into the Treasury at the rate of about \$2,000,000 a day—over \$75,000,000 up to date.

The direct comparison is:

| | England. | America. |
|--------------------|--------------|--------------|
| First month | \$5,172,000 | \$10,236,451 |
| Second month | 2,719,000 | 24,559,722 |
| Third month | 3,402,000 | 41,148,244 |
| Total | \$11,293,000 | \$75,944,417 |

The \$75,944,417 of spending already put at the service of the Government by the buyers of War-Savings Securities has transferred from millions of patriotic, saving citizens to the National Treasury command of the labor and materials to build a fleet of about one hundred 5,000-ton ships.

BABSON'S SPRING TRADE OUTLOOK.

Roger W. Babson, the noted statistical and trade expert, in his current outlook, gives the following survey of business conditions, based upon thorough investigation and careful observation of the field:

President's Message Clears the Air—Whatever hopes the Central Powers may have entertained of forcing an early peace on Prussian terms, must have been dispelled by President Wilson's latest speech. The trend towards an "inter-nation" and the safeguarding of the rights of small nations in the final settlement, which we have constantly suggested, is, however, more and more marked. The year 1918 may later afford some very practical peace developments, but apparently there is yet no basis upon which definite peace negotiations can be started. *Preparation to meet a gigantic German land drive this spring is the first thing in order.* Submarines will also be active. Business men should be safe in planning on continued war business at least during the spring months.

How to Offset Transportation Troubles—Endeavor to reduce your need for railroad transportation. In many cases this can be done by the installation of motor trucks, the use of electric freight service and by increased use of local storehouses and distributing centers. Manufacturers and jobbers who can furnish additional supplies of goods on immediate notice today enjoy a tremendous

advantage over those who must depend upon the railroads for rush deliveries. Bear in mind also the localizing effects which continued railroad troubles will exert upon business.

Make Ample Provision for Tax Payments—Sufficient rulings have now been made so that in most cases each firm can determine the amount of war taxes it will have to pay. It is highly important that full preparations be made for this account. The time limit when Federal tax returns must be in has been extended to April 1, but the time limit for payments of taxes remains the same—namely, June 15, 1918. While it may not be wise to pay the taxes in full in advance, funds reserved for this purpose can be invested to good advantage in Treasury Certificates of Indebtedness which will be accepted by the government in payment of taxes. The recent offering of 4 per cent. Treasury Certificates, due June 25, is well adapted to this purpose.

Non-essentials Must Look Out—Our advice to business men is, as it has been, to make every effort to get into some line of work that will definitely help to win the war, and will be recognized by the Government as "necessary." There are, of course, some instances where this cannot be done. In such instances, recourse to the banks is about the only means of securing additional funds. Firms in this position should carefully consider the adoption of trade acceptances. The use of acceptances tends to more prompt collections and also affords a more attractive security upon which to borrow from the bank. Most Federal Reserve Banks will rediscount trade acceptances at $\frac{1}{2}$ of 1 per cent. less than other kinds of paper. Whether trade acceptances are used or not, it is important that you offer paper which your local bank can rediscount at the Reserve Bank. So far as possible avoid borrowing, and do not make any extensions to plant which are not absolutely necessary. This is as much a matter of good business policy as of patriotism.

Certain Luxury Lines Holding Up Well—The most striking feature of the bankruptcy record in England is that some of the so-called unnecessary lines had fewer failures than those usually regarded as necessary industries. In England, the iron and steel business was the only one which showed an increase in failures last year compared with the pre-war period. We again suggest that certain merchants who are worrying about future business will find their greatest difficulty in getting enough goods to supply their trade.

On this side of the water there is a new trend of feeling. *Whereas little attention is being paid to profits in the so-called non-essential lines, the public—and labor in particular—is critically watching the profits made by the war industries. The next drive is likely to be a popular demand that large profits on Government contracts be eliminated.* Inasmuch as the people hold the reins, their demands will be fulfilled. It is probable that the war industries right now are enjoying the zenith of their prosperity and that from now until the end of hostilities their profits (after taxes) will gradually be scaled down. This will not necessarily mean an abnormal volume of failures in these lines, but it is a point for both credit men and investors to remember.

Prepare for Liquidation When the War Is Over—A study of the failure records following the Civil War shows that the volume of bankruptcies greatly increased in 1866 and 1867 and from that time gradually increased until the

great crisis in 1873. Similarly, after the present war it is apparent that there must be a heavy volume of liquidation among commercial firms. Since 1914 more new companies have been formed than would ordinarily have been established in double that time. For the most part these companies are born of war profits, and in many cases are not run upon a basis which would withstand the competition of normal times. While the outlook for the coming months is extremely favorable to the credit man, merchants should constantly have in mind the eventual readjustment, and should handle accounts accordingly.

AMERICA TO THE FRONT IN CHEMISTRY.

America is forging to the front in chemical activity. Almost outdistanced by Germany in 1913, this country has, in the intervening period of four years, leaped to the front, outstripping Germany, and is now holding first place by a long lead. These statements are based on interesting statistics compiled by E. J. Crane, Editor of *Chemical Abstracts*, a publication of the American Chemical Society, which reviews all articles on chemistry published throughout the world.

In a communication to the March issue of the *Journal of Industrial and Engineering Chemistry*, Dr. Crane gives the results as to the number of articles on chemistry published in the leading countries of the world, the study being based upon a comparison of the number of papers abstracted in 1913 and in 1917 from the chemical literature of the several countries. The results are as follows:

| Countries | Number of | Number of | Per cent | Per cent |
|-----------------------|-------------------|-------------------|------------------|------------------|
| | Abstracts in 1913 | Abstracts in 1917 | of total in 1913 | of total in 1917 |
| United States | 3940 | 4602 | 21.1 | 43.9 |
| Germany | 6539 | 2065 | 34.9 | 19.7 |
| Great Britain | 2741 | 1560 | 14.7 | 14.9 |
| France | 2481 | 794 | 13.3 | 7.6 |
| Austria | 539 | 112 | 2.9 | 1.1 |
| Italy | 905 | 305 | 4.9 | 2.9 |
| Russia | 474 | 264 | 2.5 | 2.5 |
| Holland | 328 | 276 | 1.8 | 2.6 |
| Norway | 15 | 19 | 0.08 | 0.18 |
| Switzerland | 226 | 114 | 1.21 | 1.08 |
| Belgium | 185 | 7 | 0.99 | 0.06 |
| Sweden | 110 | 64 | 0.58 | 0.62 |
| Japan | 71 | 166 | 0.38 | 1.58 |
| Spain | 34 | 26 | 0.18 | 0.24 |
| Denmark | 41 | 20 | 0.21 | 0.19 |
| Other countries | 52 | 89 | 0.27 | 0.84(a) |
| Total | 18,681 | 10,483 | | |

(a) The increase here is due chiefly to the fact that *Chemical Abstracts* is now covering certain South American journals not abstracted in 1913.

AMERICAN AND ENGLISH INCOME TAXES.

In comparison with the tax levied in England on incomes our own income taxes are moderate, indeed. In England the tax on incomes of \$1,000 is $4\frac{1}{2}$ per cent., in America nothing.

In England the tax on incomes of \$1,500 is 6% per cent.; in America nothing for married men or heads of families, and 2 per cent. on \$500 for an unmarried man.

In England the tax on an income of \$2,000 is $7\frac{1}{2}$ per cent.; in America nothing for a married man or head of a family, and 2 per cent. on \$1,000 for unmarried men.

The English income tax rate also increases more rapidly with the growth of the income than ours, a \$3,000 income being taxed 14 per cent., \$5,000 16 per cent., \$10,000 20 per cent., and \$15,000 25 per cent., while our corresponding taxes for married men are respectively two-thirds of 1 per cent., $1\frac{1}{2}$ per cent., $3\frac{1}{2}$ per cent. and 5 per cent., and only slightly more for the unmarried, due to the smaller amount exempted, the rate being the same.

DECISION OF THE U. S. COURT.

Court of Appeals of the District of Columbia.—ELISHEWITZ v. LEYSER, GREEN Co.—Decided December 3, 1917.

- TRADE-MARKS—DESCRIPTIVE WORDS—“LEGHORNETTE.” The word “Leghornette” as applied to hats *Held to be descriptive and not registrable.*
- SAME—CANCELLATION—INJURY PRESUMED. The petitioner for cancellation shows injury by the registration, though injury will be presumed to follow the improper registration of any descriptive word.

Mr. A. D. Kenyon for the appellant. No appearance for the appellee.

ROBB, J.: Appeal from a decision of the Patent Office canceling the registration of the word “Leghornette” as a trade-mark for hats on the ground that it is descriptive.

The Assistant Commissioner said:

A Leghorn hat is a very well and widely known article of commerce, fully described by the name “Leghorn,” whether it is a woman’s hat or a man’s hat. * * * The real Leghorn hat is marked “Genuine Leghorn,” and the sample hat bands filed in the application of Elisewitz are marked “Genuine Leghornette.” The petitioner for cancellation shows injury by the registration, though injury will be presumed to follow the improper registration of any descriptive word.

I consider the word Leghornette to be clearly descriptive. The suffix “ette” is very commonly and widely used to indicate a small edition or else an imitation. I think nobody would hesitate in assuming that a Leghornette hat was an imitation Leghorn hat.

We agree with the Assistant Commissioner, for in our view “Leghornette” clearly would convey to the average purchaser the idea of the character or quality of the hat to which it was affixed, and therefore should not be registered.

The decision is affirmed. Affirmed.

INTERNAL REVENUE DECISION.

T. D. 2653—*Withdrawal of distilled spirits free of tax.*

Regulations governing applications for the withdrawal of distilled spirits from bonded warehouses free of tax under the provisions of section 3464, Revised Statutes.

OFFICE OF COMMISSIONER OF INTERNAL REVENUE,
Washington, D. C., February 1, 1918.

Section 3464, Revised Statutes of the United States, provides:

The privilege of purchasing supplies of goods imported from foreign countries for the use of the United States, duty free, which now does or hereafter shall exist by provision of law, shall be extended, under such regulations as the Secretary of the Treasury may prescribe, to all articles of domestic production which are subject to tax by the provisions of this title.

Pursuant to the foregoing provision of law, the following regulations are prescribed as to the applications for the withdrawal of distilled spirits from bonded warehouses free of tax for the use of the United States:

(1) Application for the withdrawal of distilled spirits free of tax for the use of the United States shall be made on Form 543.

(2) The head of an executive department or head of a bureau not under the control of any department, who desires to withdraw distilled spirits free of tax for the use of the United States, shall sign the application on Form 543 or have such form signed by a Government officer or employee duly designated by him.

(3) Heads of executive departments or heads of bureaus not under the control of any department may, by written order, designate officers or employees in their departments or bureaus, as the case may be, to sign applications on Form 543 for the withdrawal of distilled

OUR ADVERTISERS—XXXIX.

CHUIT, NAEF & CIE
(N. Naef & Cie, successors,)
Genève, Switzerland.
Synthetics, Etc.

TO THE PRESIDENT OF THE PERFUMER PUB. CO.,
80 Maiden Lane, New York.

Dear Sir: We are in receipt of your favor and thank you for giving us an opportunity for expressing our satisfaction at the work which is being done by THE AMERICAN PERFUMER in the general interest of all concerned in the perfume trade.

Your paper affords us specially interesting reading matter, as we are far away from your business center and we have, since the publication of its first number, many times been informed through your valued organ of news which seemed to keep us in closer touch with our numerous friends on the other side of the Atlantic.

We will not miss this occasion to wish you further success and development in the future, and remain,

For Chuit, Naef & Cie,
Dear sir, yours faithfully,

F. FIRMENICH.

spirits tax free, as herein provided. They shall in such cases furnish the Commissioner of Internal Revenue copies of their orders designating the officers or employees authorized to sign the applications, together with specimen signatures, so that when the applications are received the signatures affixed thereto may be readily verified.

(4) Applications for the withdrawal of distilled spirits free of tax for the use of the United States should indicate clearly the bureau or division and the department or independent bureau for which the spirits are to be purchased and withdrawn.

T. D. 1832 is modified accordingly.

DANIEL C. ROPER,

Commissioner of Internal Revenue.

Approved: W. G. McADOO, Secretary of the Treasury.

U. S. CHAMBER OF COMMERCE.

Business readjustments to war will be the dominant note of the sixth annual meeting of the United States Chamber of Commerce, at Chicago, April 10 to 12. More than 500,000 business men will be represented at the meeting, including delegations will be there from every State in the Union, from large cities and from small. There are more than one thousand local chambers of commerce and commercial organizations comprising the membership of the National Chamber, which includes even such distant bodies as the American Chambers of Commerce at Shanghai, the Philippines, Alaska, Hawaii, Buenos Ayres, Rio de Janeiro, London, Paris and some half dozen other cities abroad. As in the past, the speakers will be men of national position.

Far Eastern Market for American Perfumery

In the Malay Peninsula there is a large trade done in perfumery and cosmetics. For the last four years the imports of perfumery and cosmetics into the Straits Settlements were valued:—In 1913, at \$502,505; in 1914, \$323,360; in 1915, at \$405,635; in 1916, at \$596,260. The imports from the United States during the years 1913-1915 increased from \$21,040 in 1913 to \$38,220 in 1915.

MANUFACTURING PERFUMERS' ASSOCIATION

We take pleasure in publishing the following letter from the president of the Manufacturing Perfumers' Association. To all Perfume, Toilet Preparation and Toilet Soap Makers:

The twenty-fourth annual convention of the Manufacturing Perfumers' Association will be held at the Biltmore Hotel, New York, on April 3 and 4, 1918, at noon.

You are cordially invited to attend these meetings, and in view of the many important problems facing all manufacturers in these industries, we want you to give us the benefit of your viewpoint, and to learn at first hand just what we are doing in the interest of everyone.

It is not essential that you be a maker of perfumes, for our scope is broad, and anyone making toilet preparations only, or toilet soaps only, will be heartily welcomed, for all the problems with which we are engaged are involved in all three lines of business.

Further particulars may be obtained from our headquarters at 309 Broadway, New York City (telephone Worth 1946).

Cordially,

A. M. SPIEHLER, President.

New York, March 18, 1918.

We strongly indorse this liberal plea, and urge all of our readers who can do so, to attend the convention and to bring their wives to the banquet on the evening of April 4.

The program banquet as to speakers is not yet complete, but will be a good one. At the business meetings addresses will be made by competent trade authorities on the raw material and container situation, which is so pregnant with possibilities for the near and remote future.

THE TIN SITUATION.

Secretary Mueller has issued the following:

Members of the association have been more or less disturbed by newspaper publications stating that the Committee on Agriculture of the House of Representatives has reported a bill prohibiting the use of tin cans for talcum. It has also been rumored that this measure is to be so rigidly enforced as to prevent manufacturers of talcum from using cans already in their possession. Concerning the facts in the case our Washington representative advises us as follows:

"As a matter of fact the bill referred to in these newspaper reports not only does not prohibit the use of tin cans for talcum, but does not refer either to cans or talcum. It simply clothes the Food Administration with authority to regulate the use of materials commonly employed for the preservation of food products and virtually transfers to the Food Administration the authority, heretofore exercised by a special committee appointed a year ago by the Secretary of Commerce, to apportion the tin supply among the various industries employing it in the manufacture of their containers. Up to the present time this Conservation Committee has not seen fit to cut off anybody, although it has taken steps to insure an adequate supply of containers for food purposes, and there is therefore no reason to believe that the Food Administration would find it necessary to impose drastic restrictions upon the use of tin plate, except in the event of a marked shortage in the supply of block tin. In such an event the use of tin plate would be curtailed by the Conservation Committee, irrespective of the passage of the pending measure, which is known as the supplemental Lever bill. In other words, the measure now before the committee merely transfers the jurisdiction over tin plate

from one authority to another and gives the Food Administrator a rather more complete control of the situation than the Conservation Committee has had.

"The misapprehension as to the purpose of the pending bill with respect to tin cans as containers for talcum is probably due to the fact that during the hearing on this bill a few days ago Mr. Hoover was asked to give some illustrations as to what the Food Administration might do in any given emergency, and said, among other things, that if there was a tin plate shortage so as to make action necessary 'we could eliminate the use of tin containers for toilet articles and non-essentials and probably make the tin go around for preservation (of food) purposes.'

"Whether the emergency will ever arise making it necessary to curtail the use of tin plate so far as to cut off supplies for containers for such articles as talcum, tobacco, etc., no one can say. Importations of block tin during the calendar year 1917 were slightly in excess of those for 1916, and considerable quantities are now being brought in from the Dutch East Indies, which more than offset the curtailment of the amount allotted to the United States by the British Government. It has been suggested that, in view of the fact that the extraordinary demand for tin containers is due chiefly to the fact that we are putting up large quantities of food products for shipment to the Allies, Great Britain can be induced to increase the allotment to the United States during the current year. There is a further possibility that our exports of tin plate, which for the seven months ended January 31, 1918, amounted to 125,000 tons, may be curtailed by embargo or by voluntary arrangement with the domestic manufacturers.

"If the war lasts long enough it is quite possible that the supply of tin available for containers for our products may be restricted and it may be necessary to utilize some other materials for a short time. No such action is immediately in contemplation, however, and in no event is it likely that our manufacturers would be prohibited from using supplies of cans already on hand."

LABELS BEARING GUARANTY AND SERIAL NUMBER MAY BE USED UNTIL SUPPLY IS EXHAUSTED.

Manufacturers who have on hand on May 1, 1918, stocks of labels bearing the guaranty and serial number ordered to be discontinued on and after May 1, 1918, will be permitted to use such labels after May 1, 1918, and until they are exhausted as the result of a ruling by the Bureau of Chemistry of the Department of Agriculture, which has just been procured by the Washington representative of the Manufacturing Perfumers' Association, who writes as follows:

"Having received communications from several houses in the trade having on hand considerable stocks of labels printed prior to the issuance of the order of the Bureau of Chemistry of the Department of Agriculture, requiring the abandonment of the guaranty and serial number after May 1, 1918, I took the matter up with the Bureau with a view to securing permission to use these stocks of labels until exhausted. I pointed out the hardship that would be suffered by manufacturers compelled to discard labels representing a considerable investment and emphasized the abnormally high cost of securing new labels at this time. I also suggested that the destruction of such valuable merchandise was certainly contrary to the general conservation policy of the Government, and I drew attention to the fact that, whatever confusion there may have been in the public mind in the past concerning the guaranty label, there was at present no misunderstanding and therefore no injury would result from the continued use of old labels.

"The Bureau officials gave the matter very prompt attention and speedily authorized me to inform manufacturers that labels bearing the guaranty and serial number printed before the issuance of the order requiring them to be abandoned on May 1, 1918, may be used after that date until exhausted. The Department will rely upon the good faith of manufacturers to omit the guaranty and serial number from all new labels and will direct no prosecutions because of the continued use of stocks not yet exhausted."

PRODUCTION OF VOLATILE OILS IN THE UNITED STATES*

By Dr. W. W. Stockberger, Physiologist in Charge of Drug Plant and Poisonous Plant Investigation, Bureau of Plant Industry, Washington, D. C.

The subject upon which I have been invited to address you is one of perennial interest. Many phases have been very ably presented at previous meetings of the Manufacturing Perfumers' Association, the members of which are ever on the alert to acquire additional information regarding the sources and production of the materials included in the perfumers' armamentary. I have assumed that your request for me to speak to you indicated a



GINGER LILY—A POSSIBLE NEW PERFUME PLANT.

desire on your part to learn at first hand something of the work of the Bureau of Plant Industry, of the U. S. Department of Agriculture, on the production of volatile oils in this country. Accordingly, I shall confine my remarks almost entirely to the experimental work which I am directing, and with the aid of a few lantern slides, I shall try to show you something of the progress we are making and also to indicate some of the obstacles we have encountered.

In the Drug and Oil-Plant Garden at Arlington Farm, Va., many odoriferous plants are grown and distilled. For each species the cultural requirements and adaptation to soil and climatic conditions are studied and the yield of volatile oil and its constituents determined. If the indications are satisfactory up to this point, then comes the task of finding a location where the economic conditions are favorable for the establishment of an industry in volatile oil production. One of the most interesting features of the work at Arlington Farm is the Perfume-Rose Garden, where from time to time a total of 95 varieties of roses have been tested. All but 41 varieties have now been discarded as unsuitable, and of those remaining a number of varieties of *Rosa rugosa* and *Rosa centifolia* have been found the most promising. During the coming summer it is planned to make some practical tests with perfume roses in one or two favorable localities in the Southern States.

At Arlington Farm there are also grown Lavender, Caraway, Anise, Wormwood, several species of the Mint Family, Rosemary, and other species which yield important essential oils. Duplicate tests are made at testing gardens in various parts of the United States. A

number of colleges and universities maintain Medicinal Plant Gardens and co-operate informally with the Bureau of Plant Industry in obtaining data regarding the production and utilization of oil-bearing plants.

At Madison, Wis., extensive experiments with Drug and Oil-Bearing Plants are being carried on under formal co-operation between the University of Wisconsin and the Bureau of Plant Industry. One phase of the research on oil plants in progress at the Madison Garden may be illustrated by reference to the work of Mr. G. A. Russell, of the Bureau of Plant Industry, on *Acorus calamus*, the source of calamus oil.¹ This plant usually occurs in low, swampy situations, but we have found that it thrives on well-drained upland soil. Mr. Russell has studied the oil from the roots, rhizomes and leaves of Calamus, grown on upland soil at Madison. The oils from different parts of the plant were found to differ markedly in their properties, due apparently to the relative quantities of terpenes or sesquiterpenes present in these oils.

Another series of studies is in progress on wild oil-bearing plants which occur in great abundance in certain localities in the United States. The character of this work may be illustrated by reference to the steam distilled oil of *Artemisia frigida*, wild sage, or mountain sage, which was first studied by Frank Rabak, of the Bureau of Plant Industry, who determined Cineol,



EXPERIMENTAL FIELD STILL.

Fenchone and Borneol as the chief constituents of this oil.² A related plant, *Ramona stachyoides* (black sage) from Southern California, has also been studied by Rabak and others. The principal constituents of the oil of this plant are Pinene, Cineol, Dipentene, Thujone and Camphor. The investigation of these plants has led to the examination of the oils of other species, that from *Artemisia tridentata* having recently attracted widespread attention as a new floatative agent for separating various ores.

¹ Journ. Amer. Chem. Society, Vol. 37, No. 10. October, 1915.

² Bureau of Plant Industry Bulletin No. 235, 1912.

* Read before the Manufacturing Perfumers' Association.

At Orlando, Florida, we have a large and fairly well equipped laboratory for the experimental study of volatile oil production in all its phases. A small experimental farm of 40 acres is also available on which various crops of oil-bearing plants are grown on a field scale. The data secured from the practical field tests and in the laboratory form the basis of our estimates of the possibilities for the commercial production of the volatile oil plants, under observation. One feature of the work at the Orlando Laboratory during the past year was the invention of a machine for peeling waste and cull oranges and the devising of a simple and practical method of ex-

camphor is the chief constituent, in the leaf oil, eugenol, and in the bark oil cinnamic aldehyde. A number of trees of this species have been grown on the experimental grounds at Orlando, Florida, but the danger of occasional low temperatures renders the commercial cultivation of this plant uncertain in areas subject to heavy frosts.

Cinnamomum cassia, the source of cassia oil, which is official in the United States Pharmacopoeia, is also under experimental cultivation at our Florida Station, but the commercial possibilities of this and the preceding species are yet to be determined.

Pycnanthemum albescens is a plant of the family Labiate, native in the Southern United States. The plant grows well in moist sandy soil and yields from 0.4 to 0.8 per cent of a colorless volatile oil having a characteristic pennyroyal odor. The possible yield per acre of this oil is estimated at 30 to 40 lbs.

The tree known as *Illicium anisatum* of the family Magnoliaceae, is the source of Star Anise Oil. Preliminary tests indicate that this plant is quite hardy in Central Florida and could probably be grown there successfully. Two other species of *Illicium* are native to Florida and may prove of value, but much further investigation will be necessary in order to determine their commercial possibilities.

Eugenia caropohyllata, the clove tree, has made fair growth at our Southern Station, but no commercial prospects for this plant are evident at present.

Persea pubescens, the swamp bay of the South, is another native aromatic plant which has been studied by the Bureau of Plant Industry. The oil contains camphor, cineol and borneol, and may prove to be of interest to perfumers.

Hedychium coronarium, or ginger lily, which belongs



TRIAL PLANTING OF ROSE GERANIUM IN FLORIDA.

tracting the oil from the orange peel. A description of the machine and the details of the process of extracting orange oil have been published in Department of Agriculture Bulletin No. 399, and need no further comment here.

A brief reference to a few of the species of oil-bearing plants under study at Orlando, will now serve to illustrate the character of the work in progress there. From *Monarda punctata* we obtain oil of horsemint, which contains a high percentage of thymol. Our experiments with this plant under cultivation for a period of over 6 years justify the conclusion that yields of from 30 to 40 pounds of oil per acre may be expected. Assuming a market price of \$2 per pound, we estimate that the commercial production of this oil can be made to show a profit of about \$16 per acre.³

The plant *Cymbopogon citratus* yields the Lemongrass Oil now extensively used for the manufacture of Citral, from which Ionone and similar products are obtained. The details of the cultivation of this plant in Florida have been worked out, and its commercial possibilities well determined.⁴ Tests on acre plots have been made to determine the cost of production, the best method of distilling the oil, and the quality of the product. Small lots of this oil have been sold in our domestic markets at the prices prevailing for the best grade of imported oil, and it seems possible to produce this oil commercially at a fair profit.

Cinnamomum zeylanicum of the family Lauraceae, illustrates how different portions of a plant may yield oils of very different character. In the root oil of this plant,



A FIELD OF LEMON GRASS IN FLORIDA.

to the family Scitaminaceae, may have some value as a perfume plant since the flowers which are very fragrant suggest the gardenia and tuberose.

Camphor production is another feature of the Florida work. The experiments with this crop have included the propagation and culture of camphor, and laboratory and factory phases of camphor production. It has been shown that the crop is one which requires operations on a large plantation scale, for economic production, and as

³ See U. S. Department of Agriculture Bulletin No. 372, 1916.

⁴ See U. S. Department of Agriculture Bulletin No. 442, 1917.

(Continued on page 24.)



Flavoring Extract Section

OFFICIAL REPORT OF FLAVORING EXTRACT MANUFACTURERS' ASSOCIATION.

F. P. Beers, president, and Thomas E. Lannen, attorney of the Flavoring Extract Manufacturers' Association, have issued Circular No. 70, which is devoted to the report of the Committee on Cost System. This report was submitted by the chairman of the committee, T. W. Carman, of Springfield, Mass. This is a subject of vital importance to all manufacturers and it is handled in the most comprehensive and practical way possible. It is impossible to reprint the report, for it would fill several of our pages and of course the accompanying tabular blanks could not be given proper exemplification within our space limits.

This report will be worth to many members much more than they ever have or ever can pay into the association in the form of dues. It is something which should make manufacturers outside of the association sit up and take notice. We will be glad to put any firms interested in communication with the officers of the association, if they are not now in touch.

SODA WATER FLAVORS' ASSOCIATION.

Thomas E. Lannen, secretary and attorney of the Association of National Manufacturers of Soda Water Flavors, has issued reports to the members during the month regarding bills in various legislatures which might affect their interests. In New York the McNab bill, which might include flavoring extracts in a prohibition measure, is still pending and likely to be defeated.

DEVELOPMENT OF ORANGE-OIL INDUSTRY IN JAMAICA.

The earthquake that in 1908 laid Messina in ruins and caused a setback to the Sicilian production of essential oils gave the first important impetus to the new orange-oil industry in Jamaica, Consul Charles L. Latham, Kingston, reports. Previous to that time Sicily had been the chief source of supply of the oils of orange and lemon, and until large stocks were lost during the earthquake there was practically no sale for West Indian orange oil. There is a difference in chemical constituents between the Jamaican and the standard Sicilian oil, and buyers were not inclined to change and thus risk altering the flavor of their products. The adequacy of supply of the standard oil to which they were accustomed also militated against the Jamaican oils finding a market except at lower prices. Small quantities had been sold as low as 75 cents a pound, which was less than the cost of production.

The prices of orange oil rose on account of restricted supplies and the prospects of reduced production, and the rise marked an opportunity for Jamaican oranges. The trade at the time faced marketing difficulties as a result of the tariff against citrus fruits in the United States, and the distance that separates Jamaica from other points where

so perishable and bulky a fruit could be advantageously sold.

PREVIOUS PRODUCTION EXPERIMENTAL.

The rise in the value of orange oil made it plain that there was money in the business of extracting it. Up to that time the production had been largely experimental, but the experiments had been sufficiently profitable to indicate that with increased prices, the local glut in production of the fruit, and the good supply of cheap labor the oil could be furnished in large quantities, and a worthwhile trade built up as soon as prejudice against a new source had been overcome.

In Jamaica the oranges are not cultivated in groves as in Sicily, but are spread out over the country in pastures and on hillsides. The orange oil is collected by the groups of girls and boys operating as follows: The boys shake the oranges down, and the girls sit below the trees and do the rinding. They may eat as many oranges as they like, of course, and after the rinding the rest of the fruit usually is flung away, cattle and pigs feeding upon it to a certain extent.

The laborers in Jamaica are paid from 30 to 60 cents a bottle, according to the quantity of oranges available within certain distances, and the laborers have to collect the oranges. The picking is done in the early hours of the day; the rinding should be done immediately in order to get the greatest quantity of oil of the best color. The fruit should be picked when full, but not entirely ripe, as in the latter condition the oil has a deeper color and brings a lower price. If the picking and rinding take place during the heat of the day the yield is smaller than when done at a lower temperature. The operator sometimes sits on a box, the rinder being attached to an arm extending in front. A good worker will get 2½ pounds of oil from 1,200 oranges.

QUANTITY DEPENDS ON CONDITION OF FRUIT.

A local dealer states that 500 oranges will yield approximately 1 pound 2 ounces of crude oil, or 1 pound filtered, and that it takes 8 hours to produce 1 pound of crude oil. The quantity obtainable depends entirely upon the class and condition of the fruit. Oranges grown in a cool section of the island will yield more oil than the fruit grown in a warm one.

Further costs and charges after rinding are those of collecting the oil from the different districts, freight to the seaports, the cost of the containers, and steamship charges.

An unfortunate feature of the orange oil industry in Jamaica is that on account of the comparatively high prices offered the oil is often adulterated with turpentine, kerosene, cottonseed oil, or other fatty oils. Such adulteration, however, usually can be detected by experienced dealers, and a campaign has been inaugurated by the island police to stop the dishonest practice. It is now reported to have been overcome. Adulteration sometimes may be detected by holding it up to the light, especially after shaking it. If the adulterant is kerosene it may be detected by the odor immediately after removing the cork from the bottle. An effective method is to pour some of the oil in the palm of the hand, rub vigorously with both hands, and then smell of it. The use of the polariscope for testing is recommended, and a hydrometer for gauging the specific gravity can also be used, but it is said to be doubtful if an accurate conclusion can be arrived at, because a cer-

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tain amount of turpentine may be added to the oil without the gravity being greatly altered.

STATISTICS OF EXPORTS FROM JAMAICA.

The Jamaican statistics for recent years show the following exports of the oil from the island:

| *Years. | United Kingdom. | | United States. | | Canada. | | Germany. | |
|-----------|-----------------|---------|----------------|---------|---------|--------|----------|---------|
| | Pkgs. | Value. | Pkgs. | Value. | Pkgs. | Value. | Pkgs. | Value. |
| 1911..... | 160 | \$7,638 | 33 | \$1,759 | 64 | \$314 | ... | ... |
| 1912..... | 219 | 15,719 | 65 | 4,396 | 29 | 970 | 88 | \$6,612 |
| 1913..... | 244 | 17,585 | 466 | 35,417 | 30 | 1,214 | 112 | 12,663 |
| 1914..... | 228 | 11,583 | 1,033 | 37,586 | 66 | 2,954 | 80 | 7,056 |
| 1915..... | 195 | 9,687 | 1,276 | 55,497 | 23 | 1,040 | .. | |
| 1916..... | 461 | 21,162 | 1,953 | 119,636 | 10 | 543 | .. | |

* Belgium in 1914 received 19 packages valued at \$302; France in 1914 received 14 packages valued at \$224.

The weight of the packages is not known, but shipments usually are made in cases of two copper containers, each with a capacity of 25 pounds net weight.

The quantities exported to the United States in the 12 months ended June 30, 1917, as shown by the invoices declared through the consulate at Kingston, were: July to September, 1916, 4,138 pounds, valued at \$6,019; October to December, 1916, 54,444 pounds, valued at \$74,391; January to March, 1917, 6,125 pounds, valued at \$9,203; and April to June, 1917, 5,047 pounds, valued at \$6,920. Shipments to the United States in 1916, declared at the consular agency at Montego Bay, were valued at \$392. There was no shipment of the product from Montego Bay in 1915.

The case containing the two copper receptacles now used (each a square pot holding 25 pounds) is of wood and strongly made. The copper pots cost in 1914 approximately \$4.87 per case of two. At present the cost of all copper goods fluctuates greatly. Some difficulties were experienced a few years ago in getting out the copper pots to meet a large demand in Jamaica, as it has sometimes taken from three to four months to send them from abroad. Some are likely to leak, it is said, and leakage causes heavy losses on account of the high value of the contents in proportion to bulk.

The greatest care should be exercised before shipment by the producer or purchaser to see that each bottle delivered contains nothing but absolutely pure oil, which is generally filtered and tested, and retested before it is finally exported. One shipper states that the product is brought by filtering to conform to the requirements of the United States Pharmacopoeia which provides that the specific gravity should be between 0.842 and 0.846, and the optical rotation not below 95 degs.

VARIATIONS IN PRICE—NEW YORK QUOTATIONS

The sale price depends upon the combined demand from the consuming countries, principally the United States and the United Kingdom, and upon the available supply from the sources of production, principally Sicily and Jamaica. Several years ago a shortage in the American orange crop resulted in its being highly profitable to ship Jamaica oranges to the United States. As the fruit itself was being shipped in large quantities it was practically impossible to obtain orange oil from Jamaica. On the other hand, it is an article the production of which may exceed the demand, causing some quantities to be held over till the following season. This occurred a few years ago, and resulted here in production being practically suspended for about 12 months.

During 1916 wholesale prices realized in New York, duty paid, for Jamaica oil varied from \$1.75 to \$2.50 a pound, including the cost of the containers. The present values in Kingston are \$1.25 to \$1.75 a pound net. Figures which have been furnished by a leading producer in the interior of the island as representing the prices by the pound realized on a lot recently handled are: Sweet orange oil, 441 bottles, each $1\frac{1}{4}$ pounds, at \$1.50; bitter orange oil, 557 bottles, each $1\frac{1}{4}$ pounds, at \$1.25; 30 bottles of dregs, not sold. The total cost, including pay of producer and delivery in Kingston, was \$1,530.90.

The producers frequently supply the "rinders" to the laborers they send out on their properties, paying a certain amount per bottle of oil brought in.

(Continued on page 24.)

PURE FOOD AND DRUG NOTES

In this section will be found all matters of interest contained in FEDERAL and STATE official reports, etc., relating to perfumes, flavoring extracts, soaps, etc.

FEDERAL.

NOTICES OF JUDGMENT GIVEN UNDER PURE FOOD AND DRUGS ACT BY THE SECRETARY OF AGRICULTURE.

Among the Notices of Judgment given under the Federal Food and Drugs Act, Nos. 5,151 to 5,450, inclusive, sent out this month by the Bureau of Chemistry, Washington, D. C., the following are of interest to our readers: 5158. Adulteration and misbranding of oil of lemons. U. S. v. * * * a corporation. Plea of guilty. Fine, \$25.

Analysis of a sample of the article by the Bureau of Chemistry showed the following results:

| | |
|---|--------|
| Specific gravity (25°/25° C.) | 0.8460 |
| Citral by Kleber (per cent.) | 3.7 |
| Rotation in 100 mm. tube at 25° C. (degrees) | 80.6 |
| Rotation of 10 per cent. distillate in 100 mm. tube at 25° C. (degrees) | 75.1 |
| Difference in rotation (degrees) | 5.5 |
| Refractive index, at 29° C. | 1.4738 |
| Iodoform test for alcohol: Positive. | |
| Ethyl alcohol (per cent. by volume) | 0.92 |
| Boiling point (° C.) | 77-78 |

Analysis indicates a washed lemon oil mixed with an oil of high rotary power, probably an orange oil product.

Adulteration of the article was alleged in the information for the reason that certain substances, washed lemon oil and other essential oil or oils, had been substituted in whole or in part for lemon oil.

5204. Adulteration and misbranding of olive oil, U. S. v. * * * v. 50 Cases of * * * Olive Oil. Decree of condemnation and forfeiture. Product released on bond.

Adulteration of the article was alleged in the libel for the reason that it consisted in part of a filthy, putrid and decomposed vegetable substance. Misbranding was alleged in substance for the reason that the labels of the article bore a certain statement, to wit, "Cream Salad Olive Oil. Guaranteed Strictly Pure," which was false and misleading in that said food was not pure.

DANGEROUS SUBSTANCES IN HAIR DYES PROHIBITED.

The New York City Department of Health has issued the following: "Lead and silver salts were formerly the main poisons to be found in hair dyes, but the wails of the would-be-young under the punishment of 'indignant nature,' who was said to hide her lash in the purple hues of a dyed moustache, more particularly the offerings of their pocketbooks, have caused many of the hair dye manufacturers to use a coal tar derivative as the base of their product. It having become evident that the use of this substance in dyes intended for application to human heads was dangerous, such use has been forbidden in this city, in accordance with the following:

"At a meeting of the Board of Health of the Department of Health, held December 31, 1917, the following resolution was adopted:

"Resolved. That the use of paraphenylenediamine—not in combination with a substance or substances capable of producing oxidation which will eliminate the injurious qualities of paraphenylenediamine—and lead, copper, and their salts, in hair dyes, intended for human use, be, and the same is hereby declared to be detrimental and injurious to health, and the use of such preparations in hair dyes intended for human use constitutes, in the opinion of this Board, a violation of the provisions of Section 128 of the Sanitary Code.

"Sec. 128. Hair dyes and other toilet preparations; sale and distribution regulated.—No person shall sell, offer for sale, give away, deal in, or supply, or have in his or her possession with intent to sell, offer for sale, give away, deal in, or supply, any hair dye or other toilet preparation, intended for human use, which, by reason of the presence of any ingredient or ingredients therein contained, shall be detrimental or injurious to health."



Mr. Burton T. Bush, president of Antoine Chiris Co., New York, has returned from a two months' trip to France.

The Lightfoot Schultz Co., Hoboken, N. J., have purchased the Theo. Ricksecker Co., Inc., New York, perfumers, and will continue the line. They have transferred the equipment, supplies, stock, etc., to Hoboken, where manufacturing will be done. No announcement has yet been made as to selling plans, etc.

Charles M. Rich, proprietor of the Star Perfumery Works, 466 Broadway, New York, has purchased from the trustee in bankruptcy of Tappan Perfume Co., New York, the good will, trade-marks, stock of goods, labels, etc. The Tappan line, which has been on the market for 40 years, will be continued as a separate line, in conjunction with Rich's present line.

M. Jean Bompard, of Grasse, perfumer, second lieutenant in the 287th Field Artillery, has been cited in the French Army Orders for bravery under fire on the night of November 5-6, 1917.

Mrs. H. C. Ryland, wife of the essential oil man, is rapidly recovering from a severe attack of bronchial pneumonia.

Mr. Jesse D. Mendes, proprietor of the J. D. Mendes Co., New York, makers of compact rouge and powder, is now in the National Army, 308th Ambulance Co. of the 302d Sanitary Train, at Camp Upton, N. Y.

The capitalization of Richard Hudnut, Inc., Millbrook, N. Y., has been increased from \$100,000 to \$500,000.

Mr. Carl L. Vietor, surviving partner of Rockhill & Vietor, advises us that there will be no change in the business management of the firm, and that affairs will proceed along the usual lines. Mr. Vietor has been a partner in the business since 1906. He graduated from Yale University in 1900, and then studied in the University of Berlin for three and one-half years. He had devoted himself largely to chemistry and finance, and was therefore well equipped for the import and export business in chemical products.

Mr. Rockhill was in Europe when the war broke out, and the many new problems presented by the new and unforeseen world conditions were met and handled by Mr. Vietor. During the past three and one-half years Mr. Rockhill traveled extensively in the far East in the interest of the firm, and during another period was physically incapacitated by a severe attack of pneumonia, so that altogether the management of the vast business has been in

Mr. Vietor's hands to a large extent, and he is therefore particularly well qualified at this time to continue the traditions of the business and to add new laurels.

Sidney M. Colgate, of Colgate & Co., New York, was one of the strong advocates of the Daylight Saving Law, recently passed by Congress, and which moves all clocks forward an hour for the seven months beginning March 31. He sent a long statement, which was read into the official record, telling the plan had been tried successfully by his firm.

Mr. W. G. Ungerer, president of Ungerer & Co., New York, is back at his desk again after a severe siege of bronchitis.

James W. Morrisson, president of Fuller-Morrisson Co., Chicago, and former president of the N. W. D. A., has returned from a winter in Florida. Mr. Morrisson went South to better his health, and returned much improved.

Master Charles Lloyd Fishbeck entered this world last month, weighing 8 pounds 2½ ounces. His father is secretary of Ungerer & Co., New York.

Master Robert Carlos Senior made his bow to the world on March 7, tipping the scales at 7½ pounds. His father is C. L. Senior, vice-president of the Florasynth Laboratories, Inc., 231 Pearl street, New York. Mr. Senior, Sr., manufactures and sells synthetics, and is striving to amass a competency and a reputation to which the young man will be glad to succeed.

Master Lindell Hewitt McBrady made his appearance in the world on February 18 and tipped the scales at the ringside at 7.51 pounds. R. H. McBrady, the happy father, is a member of the firm of J. E. McBrady & Co., Chicago, manufacturers of perfumes and toilet preparations.

Among others, these firms recently have been elected to membership in the New York Merchants' Association: George E. Evans Company, Mr. George E. Evans, 3-5 West Eighteenth street—importers of toilet articles.

Powers-Weightman-Rosengarten Company, Mr. Charles A. Loring, general manager, 145 Front street—manufacturing chemists.

A. Bourjois & Co., Inc., Mr. Bernard M. Douglas, general manager and assistant treasurer, 35 West Thirty-fourth street—manufacturing perfumers.

The National Wholesale Druggists' Association will hold its 1918 convention in New York City October 7-11.

Judgment has just been handed down to the favor of George Lueders & Co., New York, in an action brought against them by the C. P. N. Chemical Co., New York, on the sale of 500 lbs. benzaldehyde. These goods were offered to George Lueders & Co., and guaranteed to contain not over 1 per cent. of chlorine. Examination of a sample from the goods as tendered for delivery disclosed the fact that the amount of chlorine was 1.5 per cent. to 1.75 per cent., and the lot was therefore rejected.

Mr. Herbert A. Farrell, of Charles V. Sparhawk, testified as chemical expert as to the analysis of benzaldehyde, etc., and other testimony along this line was furnished by Dr. Swanson, of Stillwell & Gladding; Mr. Julius Kochler, of Fritzsche Bros., testified regarding the market conditions of benzaldehyde.

F. E. Mason & Son, Batavia, N. Y., who started the manufacture of seals and labels about eight years ago, recently completed a very commodious and artistic factory which is modernly built and equipped in every particular. This firm gives personal supervision to every step in connection with the manufacture of embossed



PLANT OF F. E. MASON & SON, BATAVIA, N. Y.

seals and labels, including the making of gold paper, die cutting, gumming and even the manufacture of special machinery in their own machine shop. The present factory is very much larger than the previous one, the equipment is already taxed to its capacity and further extensions are contemplated.

Heppel Company, perfumery, has leased part of the building at 45 East 20th street, New York City.

Joseph B. Magnus, of Magnus, Mabee & Reynard, Inc., New York, has reported for service at one of the Navy Department's aviation camps.

Charmant Specialty Company, toilet preparations, has been compelled by the growth of its business to move into larger and more commodious quarters at 101 East avenue, Long Island City, New York.

C. H. Rostron, special representative of Joseph Crosfield & Sons, Ltd., soap and chemical manufacturers, Widnes, England, was a recent visitor to New York on his way to the West Indies. He reported business good, despite the handicap of the war.

The Marden Orth & Hastings Corporation, New York City, has increased its total authorized capital to \$4,500,000 and has increased its first preferred stock to 10,000 shares, par value \$100, and second preferred to 30,000, par value \$100. It has also increased its common stock to 300,000 shares, no par.

Frederick H. Cone & Co., Inc., heavy chemicals, etc., have moved to 181 Front street, corner of Burling Slip, New York.

Palmolive Oil Company, Milwaukee, Wis., has opened a distributing office for the South at Atlanta and has placed in charge L. Cohen, who has been with the company for a number of years. V. J. Wormser is his assistant.

We are advised by Julius Schmid, Inc., New York, that Mr. A. H. Bergmann has just entered their employ as manager of their toilet preparation department. In this capacity Mr. Bergmann will supervise the manufacture of rouge and powder compacts, etc., and handle the sales in this branch of the business.

He is a graduate of Columbia University in a scientific course, specializing in chemistry and the study of colors. He entered the chemical industry about five years ago, and in the past few years as secretary of Philip Munter Co., New York, he supervised the manufacture and sale of products of the same class as he will now handle. Mr. Bergmann is a hard worker, of agreeable personality, and should be very successful in his new connection.

Warren E. Burns, vice-president of Compagnie Morana, New York, has returned from a month's trip to Cuba and Florida. Mrs. Burns has remained over at Tarpon Springs, Fla., and is expected back in New York in a few weeks.

Abonita Company, Inc., 128 South Clinton street, Chicago, Ill., appear among the new advertisers in this issue. This company was established about fifteen years ago by Dr. V. S. Hollingsworth, president and treasurer. Dr. Hollingsworth is a physician and chemist and gives his entire attention to the manufacturing department.

The business management of the company is in the hands of Mr. S. Bigelow Haley, vice-president and general manager, who has had many years' experience in the selling of toilet articles. The combination of these two competent gentlemen is a very effective one, and the growth of the business throughout the Middle West and the South has compelled them to plan for the early enlargement of the plant.

Purisol Products Corporation, manufacturer of soap, has leased a factory at 80 to 92 Third street, running through to Fourth street, Brooklyn Borough, New York.



A. H. BERGMANN.

Saturday evening, February 23, was the day set for the celebration of Washington's Birthday by a gladsome and jovial contingent of the Perfumery, Soap & Extract Association of Chicago. About thirty couple gathered at the Arena, one of Chicago's winter resorts, with ice skating and dancing for amusement. Among the prominent features of the association's bill was Mr. Doolittle, of the Mme. Isebell's Company, who recently had difficulty with the slippery surface of the Arena and was a short time ago dismissed from the knitting club with a perfect arm, cutting up some wonderful capers with as much confidence as in boyhood days. Not with daring, but with graceful and measured strokes Mr. R. H. Lingott whizzed past the reviewing stand, sometimes alone. For real daring, pep-
per, hot stuff on ice, born of self-confidence and with full determination to die or conquer, George F. Merrell, of the Allen B. Wrisley Company, took the cake. Through many swayings his magnificent figure never dreamed of and an occasional dull thud he still lives and wears the crown of victory.

The incomparable Jimmy Day, of J. B. Day & Co., was present, and, when necessary, smoothed the way on the icy surface for some of the more reluctant skaters. If a slight mishap occurred, Jimmy's twinkling eye indicated much mirth. His sympathetic words assuaged the ruffled feelings of the unfortunate. In his watch tower, Mr. M. B. Zimmer, of Fritzsche Brothers, and secretary of the association, sat at ease that he might watch the whole life-circulation of this body of fun-loving people, and philosophized upon the uselessness of broken bones, sore muscles and the other inconveniences arising from futile exertion.

To Mr. F. Z. Woods, chairman, and his co-workers of the entertainment committee, belong the credit of this and other enjoyable evenings. The association hailed him as the king of entertaining committee chairmen!

Luncheon was served at 11:30, and as the good things to eat were in process of assimilation, amid much pleasantries, the following names were subscribed to your reporter's program: Mr. and Mrs. Woods, Mrs. Israel, George Briggs, Mr. and Mrs. Keough, W. H. Shellman, Florence I. Staiger, J. B. Day, Mr. and Mrs. F. B. Young, Mr. and Mrs. C. H. Cooper, Pearl Sieper, Max Isermann, Mr. and Mrs. A. Doolittle, Mr. and Mrs. C. R. Shuesler, J. De Lorme, R. H. Lingott, Mr. and Mrs. M. B. Zimmer, Magdalen Dunham, Frederick Dunham, Mr. and Mrs. W. H. Baldwin, Mr. and Mrs. E. C. Holman, Mr. and Mrs. A. J. Baracree, Mr. and Mrs. H. D. Crookes, Mr. and Mrs. A. J. Spilker, E. I. Hopkins, Miss Bernice Clifton, Harry Bartold, Richard Bartold, Mr. and Mrs. George F. Merrell, Mr. and Mrs. F. K. Woodworth, Mr. and Mrs. J. H. Biser, Mr. and Mrs. C. Morgan.

Over all the mirth and pleasantries and good fellowship, there was the watchful eye of the president. E. C. Holman, of the Holman Soap Company, keeping his companions agog with his sallies of wit and good humor, endearing him all the more to the members of the association. The first two months of his administration presages a wonderful growth in the organization.

The February meeting of the association was held at the new quarters at the Morrison Hotel with a good attendance. Jules E. Smucker, vice-president of the Metal Package Corporation, of New York, was in attendance at the luncheon, and in behalf of the Manufacturing Perfumers' Association he extended an invitation to the members to attend the perfumers' convention in New York, April 3

and 4. The question of support by the Chicago association of the national organization in its efforts to protect this line of industry as an essential feature, in so far as Government dictation is concerned, was discussed. It was determined that the committee on legislation should confer with other bodies allied with the drug trade, and also that they might determine on a course of procedure that would be most advantageous to this and allied businesses. It was decided to hold a special meeting of this committee at an early date.

At the meeting of the association on March 5, Charles V. Sparhawk, of New York City, and the Editor of the *AMERICAN PERFUMER AND ESSENTIAL OIL REVIEW*, were guests. Both spoke briefly, the Editor dwelling on the good spirit in the Middle West and pointing out that the Chicago manufacturers who are on the Board of the Manufacturing Perfumers' Association also are members of the Chicago association, which should form a connecting link between the two organizations.

The deaths of Clayton Rockhill, of Rockhill & Vietor, and Augustin Merle, of Bruno Court, Grasse, were reported and resolutions of regret and sympathy were adopted.

"Greetings from the land of sunshine" come to us from John Blocki, of Chicago, who is enjoying the balmy breezes at Fort Myers, Florida, where Thomas A. Edison has his winter home. Mr. Blocki in sending his regards to his host of friends chronicles the fact that the temperature down there has been ranging between 67 and 85 degrees.

Jules E. Smucker, vice-president of the Metal Package Corporation of New York, has been visiting Chicago.

E. I. Hopkins, of J. L. Hopkins & Co., New York, crude drugs, will remain in Chicago for some time with the firm's Chicago representative, H. G. Spilker. Mr. Hopkins contemplates visiting other western points.

George Briggs, formerly representative of A. B. Babcock Co., of New York, has accepted a position in the purchasing department of the Allen B. Wrisley Company, soap manufacturers, Chicago.

I. Malmstrom, general manager of the North Star Chemical Works, Lawrence, Mass., manufacturers of lanoline, devoted a week to Chicago, recently. Representatives, with offices at 35 West Kinzie street, will take care of the increasing demand for this concern's product.

A. Doolittle, of the Isebell Company, Chicago, toilet preparations, who suffered a broken arm from ice skating, is back at his desk, no worse for the break.

Harold Lancaster, of Marshall Field & Co.'s toilet preparations department, Chicago, is temporarily laid up at the Presbyterian Hospital in that city.

The E. I. du Pont de Nemours Company has leased three floors of the building at 21 East Fortieth street, at Madison avenue, to house the executive offices and selling departments of several of its large subsidiary concerns after May 1.

In the British Court of Appeal, on February 19, Lords Justices Pickford, Warrington, and Scrutton dismissed the appeal of George Lueders & Co., importers, of New York, who appealed from a judgment of Mr. Justice Darling in a libel action by them against Cooke, Tweedale & Lindsay, Ltd., manufacturers' agents, of Manchester. The dispute arose out of contracts from the sale of 25 cwt. of heliotropine, for export to New York. The libels were alleged to be contained in letters written on November 19 and 22, 1915, by defendants to Mr. Naumann, plaintiffs' agent. The first of the letters contained the following passages from an English contemporary.

"It may be there is no prohibition against the export of heliotropine, but at the same time we hold documents from the War Trade Department prohibiting our export to G. Lueders & Co. of the 25 cwt. In case your friends wish to take steps to secure their rights, there is one thing we shall certainly do, and that is to subpoena the War Trade Department, and from certain documents in our possession we certainly think it would be far more advisable if your friends would drop the matter altogether."

The second letter stated: "If the matter of the heliotropine comes to law it would certainly lead to things which G. Lueders & Co. do not anticipate at the present time. Had we persisted in trying to export the stuff against the explicit instructions of our Government it would have been a serious breach of International Law, which, at the present crisis, would be a dangerous violation of the rights of our country, and we are not prepared to violate the laws of this country either for G. Lueders & Co. or for anybody else."

Mr. Justice Darling held that there was no case to go to the jury. Lord Justice Pickford, in giving judgment, said that in his opinion there was no evidence that the application made to the War Trade Department, though unnecessary and mistaken, was not *bona fide*. In the evidence before Mr. Justice Darling there was no evidence which was not *bona fide*. The correspondence is all against its being *mala fide*, and all in favor of its being *bona fide*, and if that were so then the letters which were written by the plaintiffs to the defendants on October 29 and November 1 were unnecessarily offensive. They certainly imputed to the defendants that they were purposely getting out of their contract. They imputed that they were persons who ought not to be trusted in commercial matters, and if a man was not to be trusted in commercial matters he was not to be trusted in other matters.

Plaintiffs having written intimating that they thought the defendants were not acting straightforwardly, and that they were only putting forward prohibitions they knew ought not to have been made as an excuse for not performing their contracts. Defendants said there must be no such prohibitions, but even so they were prevented from exporting to Lueders & Co., and as they had mentioned Lueders as consignees, and as—if plaintiffs were correct—there was no objection to the exportation of the article, the only conclusion could be that there was an objection to the export to the consignees. It seemed to his lordship defendants were perfectly justified in saying that, considering the way plaintiffs had threatened, and said to defendant: "If you dare to fight this action we will show you up so that you will never do business in New York again." It certainly was relevant to reply to that—"If you talk like that we may point out that things may be as bad for you as for us." His lordship

had no reason to differ from Mr. Justice Darling's judgment that there was no case to go to the jury, and he refused the appeal with costs. Lords Justices Warrington and Scrutton concurred, and the appeal was dismissed.

Mr. Thomas L. Keough, the earnest and genial Chicago representative of W. J. Bush & Co., Inc., New York, was in New York recently on business, and brought cheer to our prosaic sanctum.

Announcement is made of the incorporation of the Metal Package Corporation of New York, authorized capitalization \$1,000,000, which has taken over in its entirety the Metal Package Company. The officers and directors are: President, A. E. Bruns; vice-presidents, J. E. Smucker, H. O. Hyatt and E. H. Bancker; treasurer W. C. Young; secretary, G. S. McCready; director, A. J. De Berard.

The growth of this company, under the leadership of Mr. A. E. Bruns, has been remarkable and all portents indicate its continued expansion. Mr. Bruns is a young man and his accomplishments in the business would augur well for his wide recognition in American industrial life.

Dodge & Olcott Co. of this city, announces the following new board of officers: Francis E. Dodge, honorary president; Francis H. Sloan, president; Christian Beilstein, first vice-president; Arthur Olcott Booth, second vice-president; Russell R. Sloan, secretary; F. F. Dodge, treasurer; J. H. Howe, general manager.

Magic-Keller Soap Co., of Louisville, recently filed amended articles of incorporation increasing its capital from \$20,000 to \$300,000. The debt limit is increased from \$20,000 to \$500,000. The incorporators are George G. Montz, Charles W. Stoecker, W. S. Mentz and Edward C. Stoecker.

Mr. R. W. McLarty, a rising manufacturer of perfumes and toilet preparations in Toronto, dropped into our office recently. He was formerly with Sovereign Perfumes, Ltd., Toronto, and established his own business about a year ago.

Edgar Mihalovitch, a member of the firm of Mihalovitch Bros. Company, Cincinnati, Ohio, flavors and toilet preparations, is now serving in the heavy artillery branch of the National Army.

George L. Ringel, of Columbus, Ohio, the peptomistic representative of Fritzsche Brothers, and S. B. Penick & Co., New York, breezed into our sanctum lately and left some invigorating Middle West ozone.

Frank J. M. Miles, who has been connected with the Melba Manufacturing Company, Chicago, as perfumer for several years, is now living in Southern California.

The Editor was recently gratified to receive two Philadelphia visitors in the persons of J. N. Limbert, of the well-known vanilla bean firm that bears his name, and Robert B. Zink, his partner. Mr. Limbert was laid up for five weeks, during February and early March, by a painful infection of the right ear. Surgical treatment was required, and this popular importer is again on the commercial firing line.

What is said to be the largest single issue of notes approved by the Federal Reserve Board since the Government started supervision of new securities issues was announced on March 4, when a syndicate of banks headed by the Guaranty Trust Company purchased \$25,000,000 serial 7 per cent. notes sold by the Proctor & Gamble Company. The notes will run from one to five years and were offered to the public at prices ranging from 99 1/4 and interest to 97 and interest. The yield will range from 7 1/2 to 7 3/4 per cent., according to maturity. The issue was quickly oversubscribed.

It is stated that the issue has the approval of the United States Food Administration, which was interested because the Procter & Gamble Company is one of the largest producers of foodstuffs manufactured from vegetable fats, such as cotton and cocoanut oils in the country. It produces one-third of all the lard substitutes made in the United States. It also produces one-third of the American glycerine supply. Increased production of glycerine and food products has become a national necessity.

The proceeds of the note issue will be used to take up bank loans amounting to \$18,500,000 and for other corporate purposes. This financing became necessary owing to the increased cost of raw materials and enlarged production due to the war. The notes are a direct obligation to the Procter & Gamble Company. They are dated March 1 and will fall due in five equal annual installments from March 1, 1919, to 1923, inclusive.

A financial statement issued by the Procter & Gamble Company in connection with the offering shows that the gross business of the company has increased from \$55,913,795 in 1913 to \$128,549,649 in 1917. Net profits have increased progressively during the same period and for 1917 were \$7,056,494. After all deductions, including war taxes, net profits for 1917 were equal to four times the annual interest requirement of the new notes. It is stated that net profits for the current year will be in excess of maximum annual requirements of the notes for both interest and maturing installments of principal. The company has outstanding \$2,250,000 of 8 per cent. cumulative preferred stock and \$14,598,468 common stock. It has paid full dividends on the preferred stock continuously since 1890 and has paid 12 per cent. or more annual dividends on its common stock since 1892. It now pays a regular dividend of 20 per cent. a year in cash and, in addition, 4 per cent. is payable in common stock.

We received, too late for mention in our January issue, a fine, large wall calendar for 1918 from the Blanke-Baer Chemical Company, St. Louis, Mo. Likewise a neat miniature calendar from the Wolmark Chemical Company, New York City.

American Druggists' Syndicate, at its recent twelfth annual convention, declared an 8 per cent. dividend.

Mystic Cream Company, of which Harry C. Ogden is president, plans to build a new factory in Middletown, N. Y.

Included in the will of the late Dr. Joseph P. Remington, former dean of the Philadelphia College of Pharmacy, is a bequest to that institution of \$10,000 in trust. The income from this fund is to be used for the support of worthy students. The estate was valued at \$189,474.

Fries & Fries, manufacturing chemists, of Cincinnati, Ohio, have bought an acre and a half of property at 143 to 159 Woodworth avenue, Yonkers, and have begun alterations on the buildings. They will use the plant for the manufacture of perfumes, syrups and waterproof coating.

Prof. Charles H. La Wall, president-elect of the American Pharmaceutical Association and dean of the Philadelphia College of Pharmacy, was a guest of honor on March 5 at a dinner given in the City Club of Philadelphia under the auspices of the local branch of the association. There was a distinguished gathering of pharmacists from eastern cities, and Dr. Harvey W. Wiley was among the speakers, who also included Caswell A. Mayo, E. B. Eberle, Howard B. French and others.

The Alumni of the University of Michigan College of Pharmacy is planning to present a life-size portrait of the late Dr. Julius O. Schlotterbeck to the college at the commencement next June, which will be its fiftieth anniversary. Leon Makielski, an artist who has done some notable work, is now painting the portrait. The total cost will be about \$750, including frame, etc., which sum is being raised by subscription, and any amount, from 50 cents to \$50, will be acceptable from any of the friends of the late chemist. Should there be a surplus each subscriber will receive a souvenir. F. F. Ingram, Jr., of the Frederick F. Ingram Company, Detroit, Mich., is secretary of the Alumni Committee, and subscriptions should be sent to him. No doubt many friends of Prof. Schlotterbeck in the Flavoring Extract Manufacturers' Association and other organizations will be glad to participate in this tribute to his services and memory.

Burt's Box Bulletin for March contains a tribute to the inventive genius of Mr. Carlos Holly, now 80 years old, and who has been associated with the F. N. Burt Company, Ltd., of Buffalo, N. Y. Aside from numerous minor inventions and a meter to measure steam, as well as a Chinese typewriter, Mr. Holly contributed these inventions of importance to our allied industries: A paper carton making, folding, counting and stacking machine, fed off a roll, and entirely automatic; the Holly paper box-making machine, a combination of clever and intricate mechanical movements, second, perhaps, only to the linotype machine of modern invention; the paper slide box-making machine, a close second to the machine mentioned just above. Mr. Holly has now practically retired.

Peet Brothers Soap Company has just leased a large number of oil cars from the Western Pacific Railroad to transport cocoanut oil to its plant in Kansas City from the Pacific Coast.

Dental & Toilet Products Corporation, Manhattan Borough, New York City, has increased its capitalization from \$125,000 to \$1,000,000.

Mr. Walter Lingenfelder, for nearly nine years publicity man for the American Druggists' Syndicate, Long Island City, New York, and editor of its drug journal, the *Voice of the Retail Druggist*, was recently admitted as an attorney to practice law in the courts of New York State. He is at present with the American Chemical Products Co., 23 Liberty street.

Hugues Aine, Grasse, France (Ungerer & Co., New York). We are in receipt of a communication regarding the pomade situation, which is as follows:

The market of pomades will undergo this year a big change. At the present time nobody knows whether the manufacturers of Grasse will be able to make pomades, as we await for this the arrival in France of the greasy raw material, and nothing indicates that we shall obtain this grease. In such a case we should all be put on the same level, for the purchases of the raw materials have been made in common. That is to say that there will be grease for all of us, or for none of us. If we receive the raw material we will have it at a price three times higher than the old price, or in other words, that before it is perfumed the greasy matter will cost us as much as was the cost formerly of the pomades completely manufactured. It will therefore be necessary to revise strictly the cost prices and to establish selling prices in proportion.

Four new directors were chosen at the annual meeting of the National Aniline and Chemical Company, to succeed E. L. Pierce, J. M. Goetchius, William H. Nichols and Charles T. Thurnauer. They were L. C. Jones, Clinton S. Lutkins, R. C. Taggersell and O. F. Webber. Other retiring directors were re-elected. The stockholders voted to increase the preferred stock of the company to 31,237 shares by authorizing the issuance of 45,652 shares additional, having a par value of \$100 each, making the total capitalization of the company \$25,504,650, with 395,990 shares of common stock having no par value.

Subsequently, on March 12, the following officers were elected for the ensuing year: President and chairman of the Board, William J. Matheson; vice-presidents, Dr. William Beckers, Robert Alfred Shaw, I. F. Stone and Dr. L. C. Jones; treasurer, Henry I. Moody; assistant treasurers, G. W. Yates and T. S. Baines; secretary, William T. Miller; assistant secretary, W. E. Rowley; chairman of the executive committee, Henry Wigglesworth.

The income account of the Semet-Solvay Company for the year ended December 31, 1917, shows gross earnings of \$8,340,258, and a balance of \$3,761,302 after deduction of interest, depreciation charges and excess profits and income taxes. Dividends for the year amounted to \$1,599,992. This compares with gross earnings of \$10,983,918 for eleven months ended December 31, 1916, a balance of \$10,536,612, and dividends of \$1,300,000.

McKesson & Robbins, Inc., New York, have increased their selling force by the addition of G. H. Dikeman, for many years connected with one of the largest pharmaceutical and chemical houses in the country.

Fourth class postal weights have been increased from 50 to 70 pounds when mailed for first and second zones; from 20 to 70 pounds for the third zone, and from 20 to 50 pounds for all other zones, by special order of the Postmaster-General, effective March 15. All parcel-post mail, including farm and factory products, is included.

Hugh Craig has resigned as editor of the *N. A. R. D. Journal* and director of publicity of the National Association of Retail Druggists to accept a position as chief of the publicity department of the Nyal Co., a subsidiary of the Frederick Stearns Co., of Detroit, Mich.

We have received the following notice:

CHANGE OF ADDRESS

Please note that on and after March 25, 1918, we will be located in our new factory at No. 345 Eldert street, corner of Irving avenue, Brooklyn, N. Y., where all mail should be addressed.

BRASS GOODS MANUFACTURING CO.,

HERBERT O. HYATT, President.

FRANK S. HYATT, Secretary.

NEW PRICE LISTS, PUBLICATIONS, ETC.

PROPRIETARY ASSOCIATION AND THE NATIONAL WHOLESALE DRUG ASSOCIATION.—These associations have jointly published a 732-page book, 6 x 9, giving the STATE "PURE DRUG" Laws enacted since the passage of the National Food and Drug Act, June 30, 1906, with a reprint of said Act as amended. The following statistics, etc., are included: The Revenue Law of 1917; the Child Labor Law; Harrison Anti-Narcotic Act, and the Narcotic Laws of the Several States. Also Cuban, Porto Rican and Philippine Decrees and Regulations; Canadian Proprietary Medicine Law; National and State Insecticide Laws; Net Weight Law; Advertising Laws; Prohibition Laws, and other laws relating to the drug trade to Dec. 31, 1917.

IRVING NATIONAL BANK, New York City, recently has issued two timely and interesting pamphlets on "Trade Acceptance Progress" and "Practical Questions and Answers on the Trade Acceptance Method." The bank also has published in pamphlet form an address on the "Efficiency of War and Peace," by its president, Rollin P. Grant.

SYNDICAT GENERAL DES PRODUITS CHIMIQUES, Paris France, sends us its bulletin for December, which contains the usual assortment of interesting information.

NATIONAL ASSOCIATION OF MANUFACTURERS, Foreign Trade Department, 30 Church street, New York, has issued an instructive special bulletin chiefly devoted to trade conditions in British India, viewed from the standpoint of its interest to American manufacturers.

NATIONAL CITY BANK, New York, has published a "History of the Greenbacks," being an exhaustive review of the currency situation at various periods in the last half century of American finance.

A. ALEXANDER, 188 St. Nicholas avenue, New York, has sent out a circular to his patrons and others on the advantages urged for his compact rouge machinery.

ARABOL MFG. CO., 100 William street, New York, in its March announcement to the trade, calls attention to the increased use of its pastes and adhesives by discriminating labellers in various industries.

NEW INCORPORATIONS.

National Potash Corp., \$1,000,000 capital stock, has been incorporated in Delaware by J. Graham, R. Field, A. J. Crossly, all of Los Angeles.

Standard Soap Co., Oklahoma City, Okla., \$5,000 capital stock, has been incorporated by L. F. Houghton, R. I. Brown and J. E. McKee.

Sen Sen Extract Co., Brooklyn Borough, New York city, \$5,000 capital stock, has been incorporated by J. Fisher, C. and L. J. Hirshleifer, 206 Keap street, Brooklyn.

Blue Cross Supply Co., Bronx Borough, New York

city, barbers' supplies, \$10,000 capital stock, has been incorporated by L. S. Friedman, J. J. and L. E. Sparler, 484 East Tremont avenue.

Josiah Smith Phenyle Co., Yonkers, N. Y., soaps, paints and insecticides, has been incorporated with a capital stock of \$25,000 by H. Raynes, J. R. and F. M. Roberson, Yonkers.

Edible Cocoanut Oil Corp., Wilmington, Del., has been incorporated to manufacture perfumes and derivatives of cocoanut oil. Its capital stock is \$10,000,000 and the incorporators are C. L. Rimlinger, M. M. Clancy and F. A. Armstrong.

Richard M. Krause, Manhattan Borough, New York city, labels and designs, \$100,000 capital stock, has been incorporated by R. M. and A. Krause, J. E. Buckley, 419 68th street, Brooklyn.

Federal Soap Corp., Manhattan Borough, New York city, to manufacture soaps, \$30,000 capital stock, has been incorporated by R. K. Dehler and A. H. Rees, 150 Nassau street, New York city; C. W. Harlow, Jersey City, N. J.

India Products Co., Manhattan Borough, New York city, drugs, chemicals and spices, has been incorporated with a capitalization of \$30,000 by E. F. and E. Groeniger, B. Bernbaum, 320 Broadway.

Klozesavers Mfg. Co., Manhattan Borough, New York city, drugs, chemicals and perfumes, has been incorporated with a capital stock of \$50,000 by P. Drellier, G. N. and N. Farquhar, 160 West 77th street.

Lakeside Potash Co., Portland, Me., to mine and otherwise extract coal, potash, etc., and prepare same for market, has been chartered with \$1,000,000 capitalization.

Nutro-Pyro Corp., Manhattan Borough, New York city, tooth powders and paste, \$50,000 capital stock, has been incorporated by L. Bugbee, J. and L. Rueff-Jordan, 402 Audubon avenue.

Daily Changeable Sanitary Toothbrush Co., Inc., Manhattan, New York, city, to manufacture toothbrushes, \$100,000 capital stock, has been incorporated by B. C. Emanuel, M. Kovinsky, 25 Broad street; N. M. Eisenberg, 500 West 175th street, New York city.

Var Soap & Chemical Co., Cleveland, Ohio, \$100,000 capital stock, has been incorporated by E. O. Bonsteel, W. C. Thohaben, E. E. Zimmerman, C. M. Kelsey and R. B. Friedman.

Gingo Soap Co., of Greenville, S. C., has been chartered with a capital stock of \$600, the officers being B. P. Woodside, president and treasurer, and R. C. McCarter, secretary.

Sirrus Corp., Manhattan Borough, New York city, to deal in toilet preparations and soap compounds, \$50,000 capital stock, has been incorporated by M. C. Monroe, M. Clark and M. Mabon, 165 Broadway, New York city.

Empire Dental Supply Co., Buffalo, N. Y., \$10,000 capital stock, has been incorporated by H. L. Jauch, G. C. and W. G. White, Buffalo.

Para Crude Oil Corp., New York city, to manufacture soaps and petroleum products, \$10,000 capital stock, has been incorporated by Theo. Bailey, Thomas G. Correll, Stanley H. Searles, New York city.

Seminole Chemical Co., Manhattan Borough, New York city, to manufacture chemicals, drugs, etc., \$100,000 capital stock, has been incorporated by M. Suess-

kind, 320 Riverside Drive; L. Joseph, 15 West 107th street; I. J. Joseph, 1421 Madison avenue, New York.

Peoria Sanitary Co., Peoria, Ill., capitalized at \$4,000, to manufacture liquid soap, has been incorporated by H. D. Horgan, J. W. Fisher and Leslie Harrison.

Southern Chemical Co., 1213 Mills Building, El Paso, Tex., \$20,000 capital stock, has David S. Russek, president-treasurer; Marcos Russek, Jr., vice-president; Leo Risenfeld, secretary; R. J. Anderson, manager; W. H. Seamon, construction engineer. It will manufacture caustic soda, soda ash and sodium sulphate; monthly output, 500 tons caustic soda and 300 tons soda ash.

IN MEMORIAM FOR DEPARTED FRIENDS.

BRUCKER, CARL, senior resident member of Fritzsche Brothers, New York, March, 1913.

DALLEY, HENRY, retired perfumer and one of the founders of the M. P. A., West Redding, Conn., March 9, 1916.

DIEHL, C. LEWIS, former president A. Ph. A., and reporter on pharmacy's progress, Nashville, March, 1917.

DOHME, WILLIAM F., of Sharp & Dohme, pharmaceutical manufacturers, Baltimore, March, 1913.

DREXEL, FRANK F., perfumer for the William H. Brown & Bro. Co., Baltimore, Md., March, 1917.

FERGUSON, JAMES A., soaps, Louisville, Ky., March, 1915.

FOX, HENRY C., of H. C. Fox & Sons, glass bottles, Philadelphia, March, 1910.

GRANT, W. A., soap chemist, Passaic, March, 1914.

GREEN, CHARLES H., in charge of perfumery and soaps for H. K. Wampole & Co., Perth, Ont., March, 1906.

GUILD, FREDERICK A., in charge of making toilet preparations and perfumes, Colgate & Co., March, 1909.

HAZELHURST, MAJOR CHARLES WHITEWAY, soaps, England, March, 1912.

HOLCKE, ROBERT A., barbers' supplies, Brooklyn, N. Y., March, 1917.

KIRK, JAMES A., president of J. S. Kirk & Co., soaps, Chicago, Ill., March, 1907.

LAMBERT, S. H., essential oils, London, March, 1913.

LAYMAN, CHARLES NOEL, of Wright, Layman & Umney, essential oils, London, England, March, 1910.

LUNT, JAMES CAMMETT, soap manufacturer, Portland, Me., March, 1915.

LYON, DR. ISRAEL, toilet supplies, Englewood, N. J., March, 1907.

MUNTON, CHARLES, associated with Augustin Merle, proprietor of Bruno Court, Grasse, March 5, 1916.

OLCOTT, GEORGE N., son of George M. Olcott, Dodge & Olcott Co., New York, March, 1912.

POOLE, THOMAS S., soaps, Denver, Mich., March, 1913.

RIKER, WILLIAM B., perfumery, New York, March, 1906.

RIPPEY, WILLIAM, manufacturer of flavoring extracts, Cincinnati, Ohio, March, 1917.

ROGERS, GEORGE L., soap manufacturer, Centerdale, R. I., March, 1917.

SHEDD, FREEMAN B., Lowell, cologne, March, 1913.

STUART, FRANCIS F., flavoring extracts, Niagara Falls and Toronto, Ont., March, 1914.

TENNEY, HENRY W., proprietor of the Warren Soap Mfg. Co., Canton, March, 1916.

WILLIAMS, JAMES BAKER, founder of J. B. Williams & Co., Glastonbury, Conn., March, 1907.

WOODLEY, GEORGE F., JR., Woodley Soap Manufacturing Co., Boston, Mass., March, 1912.

CLAYTON ROCKHILL.

Clayton Rockhill, of Rockhill & Vietor, New York, died suddenly at his home, the Aptorp, Seventy-ninth street and Broadway, on March 1, of heart failure, at the age of 56. Mr. Rockhill was a native of Pittstown, N. Y., where he was born on May 17, 1861. After studying at St. John's School, Ossining, and Columbia University, New York, he started business life with W. T. Coleman & Co., commission merchants, where he remained several years. In 1884 he established himself as importer and commission merchant, and in 1906 was joined by the surviving partner, Carl L. Vietor.

Mr. Rockhill was a man of engaging personality, of generous impulses and sterling integrity. In 1912 he was appointed honorary consul general by the Bulgarian government, and this post he resigned soon after his return to this country in 1914. He was abroad when the war broke out, and the worry and strain of those months, coupled with a recent attack of pneumonia, weakened his heart.

He was prominent in club and social circles, being a member of India House, the Asiatic Society, the Drug and Chemical Club, the Downtown Association, the Rumson Country Club, the Ardsley Club and the Sachem Head Yacht Club.

Mrs. Evangeline Smith Rockhill and three children survive—Eleanor, Jerome and Robeson Rockhill.

Funeral services, attended by a great many essential oil, drug and perfumery men, were held on March 4 at the Church of Heavenly Rest, New York, and interment was made in Rosedale Cemetery, Orange, N. J.

Augustin Merle.

The dean of the perfume industry in Grasse, M. Augustin Merle, died March 3. Mr. Merle, with his late brother, M. Anton E. Merle, was co-proprietor of the well-known firm, Bruno Court. Mme. Anton Merle is therefore the sole owner of the business, and she has advised the American representatives, Compagnie Morana, New York, that a competent manager has been retained, and that the business will go along as usual. In an early issue we hope to publish a proper biography of M. Merle.

John W. Kahle.

John Wesley Kahle, for more than a score of years president of the Crescent Manufacturing Co., Seattle, Wash., died on February 2, following an operation performed in the hope of prolonging his life. Mr. Kahle was born in Pennsylvania, April 4, 1858, but moved West early in life and became one of the leading manufacturers

in the Pacific Northwest. He is survived by his mother, Mrs. G. S. Kahle, two brothers, W. J. Kahle, his successor in the business, and D. B. Kahle, of Soap Lake, Wash.; three sisters, Mrs. J. M. Weaver, Mrs. F. P. Gardner, and Mrs. H. T. Smith, and an adopted son, C. O. Kahle, also connected with the Crescent Co.

John R. Caswell.

John R. Caswell, proprietor of the old New York drug and toilet goods house of Caswell, Massey & Co., died at Newport, Rhode Island recently. He was 90 years old. The old store of Caswell, Mack & Co., later Caswell, Hazard & Co., and then Hazard, Hazard & Co., was established in 1780, and for years conducted the largest and most choice prescription business in the city. In 1893 the store was moved to Fifth avenue near Twenty-eighth street, but within a few months was taken back to Broadway at Twenty-seventh street. Mr. Massey died at the age of 74.

William H. Barrett.

William H. Barrett, one of Chicago's pioneer industrial chemists, died recently in Jacksonville, Fla. Death was due to pneumonia. Mr. Barrett was 68 years old, and had retired from active business about four years ago. He was president of Barrett & Barrett, Chicago; Barrett & Co., Minneapolis, and the Barrett & Barrett Mills, Bangor, Me., vinegar manufacturers. Mr. Barrett is survived by his widow; a son, who is a member of the 108th Engineers, and a daughter, Mrs. Martha Fairchild, wife of the president of the Fairchild Soap Company, of Chicago and New York.

Obituary Notes.

Dr. Henry P. Osborn, inventor of many dental devices and a process for manufacturing tooth powder, died suddenly in this city on March 12, aged 50 years.

H. M. Armes, who traveled North Dakota for the Hegener Barber Supply Co., Inc., of Minneapolis, died recently as the result of a paralytic stroke.

Mr. M. J. Sherry, father of W. A. Sherry, of George V. Gross & Co., New York, died on March 3, 1918, at the age of 70, after only a week's illness.

Mrs. Sophie Bruns, mother of Alfred E. Bruns, president of the Metal Package Corporation, Brooklyn, N. Y., died suddenly on March 18, at her home, 157 Bainbridge street, Brooklyn, N. Y., at the age of 75.

Her last birthday was celebrated by the family and many friends on March 13, and practically up to the last minute she was active and interested in current events. Four sons and two daughters survive. Funeral services were held at her late home on Wednesday evening, March 20, and interment was made the following morning at Lutheran Cemetery, Brooklyn.

M. Stephane Dumoulin, of Nice, France, an old-time perfumer, and president of the Tribunal of Commerce of Nice, died January 30, at an advanced age.

He was formerly proprietor of the house of Warrick Freres, but for a number of years has been retired from business.

The text pages of the AMERICAN PERFUMER AND ESSENTIAL OIL REVIEW do not contain *all* of the news. You must read the advertising pages also to get the full benefit.



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PATENTS AND TRADE MARKS.



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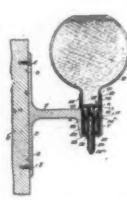
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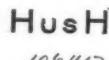
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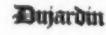
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NOTE TO READERS.

This department is conducted under the general supervision of a very competent patent and trade mark attorney. This report of patents, trade marks, labels and designs is compiled from the official records of the Patent Office in Washington, D. C. We include everything relating to the four co-ordinate branches of the essential oil industry, viz.: Perfumes, Soap, Flavoring Extracts and Toilet Preparations.

The trade marks illustrated are described under the heading "Trade Mark Registrations Applied for," and are those for which registration has been provisionally granted.

All inquiries relating to patents, trade marks, labels, copyrights, etc., should be addressed to

PATENT AND TRADE MARK DEPT.,
Perfumer Pub. Co. 80 Maiden Lane, New York.

PATENTS GRANTED.

1,256,075.—COLLAPSIBLE PASTE-TUBE. Simon S. Tainter, Weld, Me., assignor of one-half to Guy O. Gardner, Dixfield, Me. Filed Dec. 23, 1916. Serial No. 138,531.

In a combination with a collapsible paste tube, a nipple slidable longitudinally and also rotatable thereon, said cap being formed with an outlet aperture therein, the outer end of the nipple normally closing the aperture in the cap, said nipple and cap being so constructed that when the cap is unseated there will be formed a passage from the discharge aperture in the nipple to the discharge aperture in the cap, said cap being formed with an elongated transverse slot in one side, the upper side of the slot throughout its length being in a plane at right angles to the axis of the

cap, the lower side of the slot throughout its length being in a plane inclined to the axis of the cap, a pin secured to the nipple and projecting through said slot, the diameter of the pin being less than the wider end of the slot, and a spring within the cap which holds the cap seated in closed position and holds the pin against the upper side of the slot, both when the pin is at the wide end of the slot and at the narrow end of the slot, the spring being yieldable and the cap movable longitudinally under pressure to unseat the cap when the pin is in the wider end of the slot.

1,256,345.—COLLAPSIBLE TUBE. George Marceau, New York, N. Y. Filed March 16, 1916. Serial No. 84,975.

In a collapsible tube the combination consisting of the screw cap, the slit cut transversely through the body of the screw cap, the portion above the slit provided with a centrally located perforation, the latter adapted to be placed over a hook or nail, when the portion above the slit is turned upwardly and used as a hanger.

1,257,173.—SPRINKLING-STOPPER. Emile Louis Allié, Paris, France. Filed May 27, 1914. Serial No. 841,231.

1. A sprinkling stopper of the character described, comprising a hollow conical member having a cylindrical hood for securing it to a bottle, said member being slotted and having tongues projecting from its apex over the slots thereof, a hollow cylindrical body having a reduced lower end and secured to the first named conical member below the second member and forming therewith a chamber, a ball in said chamber, and an elongated valve in the reduced end of the body and provided with ribs.

1,257,397.—PROCESS OF HYDROGENATING OILS OR FATS. William D. Richardson, Chicago, Ill., assignor to Swift & Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 11, 1912. Serial No. 730,746.

1. In the hardening of oily and fatty material the process which comprises treating a body of such material with hydrogen in the presence of electrically disintegrated metal

2. In the hardening of oily and fatty material the process which comprises electrically disintegrating a metal in a fluid medium, removing such medium, adding the disintegrated metal to a body of such material and treating such body with hydrogen.

1,257,425.—DISPENSING APPARATUS. Joseph Purmort, Trux, Rochester, N. Y. Filed April 24, 1917. Serial No. 164,107.

1. In a dispensing apparatus, a bracket, a receptacle thereon provided with an opening, a container mounted upon the receptacle provided with a closure of relatively soft material, and means normally closing said opening and movable in the direction of the container to puncture said closure and to uncover the opening.

1,257,436.—SOAP-STICK HOLDER. Philip K. Williams, Glastonbury, Conn., assignor to The J. B. Williams Company, Glastonbury, Conn., a Corporation of Connecticut. Filed March 17, 1916. Serial No. 84,849.

1. In a device of the character described the combination with a soap stick shouldered at one end, of a sleeve provided with a tubular portion snugly fitting said stick and a shoulder engaging the shoulder of said stick, the part of said sleeve below said shoulder being threaded and shorter than the shoulder part of said stick so that the latter projects beyond said sleeve, and a cap surrounding and having threaded engagement with the lower end of said sleeve, the end wall of said cap engaging the end of said stick.

1,257,545.—LIQUID SHAVING-SOAP. Joel Starrels, Montclair, N. J., assignor to Ellis-Foster Company, a Corporation of New Jersey. Filed March 23, 1914. Serial No. 826,612.

A liquid shaving soap containing alkali stearate in a supersaturated condition in an aqueous solution of a freely soluble soft soap forming a composition which remains permanently as a non-pasty fluent liquid which possesses very free lathering qualities and which forms a lather drying with extreme slowness and which does not form heavy deposits of stearin soap material.

1,257,910.—DISPENSING DEVICE. Hugo Meves, Chicago, Ill. Filed Nov. 13, 1916. Serial No. 130,975.

1. A powder dispensing device comprising a supporting member having a flanged perforated seat to removably support a perforated powder container, and a manually operated freely reciprocatory tapping device wholly beneath and depending from said support to intermittently strike the perforated bottom of the container supported on said seat for the discharging of its contents through the perforation therein.

TRADE-MARK REGISTRATIONS GRANTED.

120,543.—Perfume, Toilet Water, Face-Powder, Sachet, Liquid Face-Powder, Face-Cream, and Smelling-Salts.—The Baldwin Perfumery Co., Chicago, Ill. Filed September 10, 1917. Serial No. 106,152. Published December 11, 1917.

120,568.—Toilet Soap.—E. Gal. Sociedad en Comandita, Madrid, Spain. Filed February 15, 1916. Serial No. 92,859. Published December 18, 1917.

120,578.—Food-Flavoring Preparation.—Hardenbergh Mfg. Co., Auburn, N. Y. Filed September 25, 1917. Serial No. 106,423. Published December 11, 1917.

120,602.—Certain Named Toilet Preparations.—Wm. H. McClure, Washington, D. C. Filed August 20, 1917. Serial No. 105,743. Published December 11, 1917.

120,629.—Hair-Tonic.—Pocahontas Owens, Chester, Pa. Filed October 22, 1917. Serial No. 106,807. Published December 11, 1917.

120,635.—Tea, Flavoring Extracts for Foods, Vinegar, Canned Salmon, Spices, and Red Pepper.—F. E. Royston & Company, Inc., Aurora, Ill. Filed October 4, 1917. Serial No. 106,595. Published December 11, 1917.

TRADEMARK REGISTRATIONS APPLIED FOR.

95,213.—The J. B. Williams Co., Glastonbury, Conn. (Filed May 17, 1916. Used since April, 1913.)—Shaving-stick, shaving-powder, shaving-cream, shaving liquid and shaving-cake soaps, and also toilet soaps.

97,250.—Lautz Bros. & Co., Buffalo, N. Y. (Filed Aug. 10, 1916. Used since Oct. 21, 1874.)—Soap.

99,320.—Cane Company, Jacksonville, Fla. (Filed Nov. 16, 1916. Used since Sept. 15, 1916.)—Preparations for the treatment of stomach, kidney and liver diseases; for purifying the blood and toning the system; for dandruff; for tender, bleeding or receding gums, and preserving and whitening the teeth.

103,537.—The William S. Merrell Chemical Co., Cincinnati, Ohio. (Filed May 4, 1917. Used since Mar. 26, 1917.)—Shaving-cream in the nature of shaving soap.

103,915.—A. Bourjois & Co., Inc., New York, N. Y. (Filed May 18, 1917. Used since Nov. 27, 1903.)—Face-powder, toilet waters, rouge, lip sticks, perfumes, eyebrow-pencils and pomades.

104,447.—Block & Kuhl Company, Peoria, Ill. (Filed June 15, 1917. Used since Apr. 24, 1917.)—Tissue cream, peroxid cream, vanishing cream, honey and almond cream, cucumber toilet cream, cleansing cream, extract vegetal, liquid shampoo, antiseptic after shaving lotion, bayrum, glycerin and rose water, liquid face powder, talcum powder, face powder, toilet water and box perfumes.

104,612.—Hugh G. Keeney, New Orleans, La. (Filed June 22, 1917. Used since May 1, 1917.)—A non-saponaceous liquid preparation to remove spots and dirt from textiles.

104,714.—Paul F. Deford, Pasadena, Cal. (Filed June 27, 1917. Used since September, 1916.)—A hair-dye.

105,548.—W. Sheinker & Son, New York, N. Y. (Filed Aug. 8, 1917. Used since June 30, 1917.)—A concentrated syrup for a non-intoxicating fruit beverage sold as a soft drink.

106,417.—Joseph Cave, Philadelphia, Pa. (Filed Sept. 25, 1917. Used since Feb. 18, 1908.)—A preparation for the relief of the odor of perspiration.

106,821.—The C. F. Sauer Co., Richmond, Va. (Filed Oct. 17, 1917, under ten year proviso. Used since last twenty-eight years.)—Food-flavoring extracts.

106,908.—Bemper L. Dieffenbacher, Los Angeles, Cal. (Filed Oct. 23, 1917. Used since September, 1917.)—Dental cream.

107,122.—George P. Papadopoulos, New York, N. Y. (Filed Nov. 2, 1917. Used since 1904.)—Olive-oil.

107,216.—The Escejay Co., Cincinnati, O. (Filed Nov. 7, 1917. Used since Oct. 20, 1917.)—A cleansing and bleaching crystal.

107,378.—Henry Willard Allen, Ridgefield, Conn. (Filed Nov. 15, 1917. Used since Sept. 22, 1917.)—Tooth-paste, liquid tooth-wash and dental soap.

107,552.—Joseph Haigh, Kansas City, Kans. (Filed Nov. 23, 1917. Used since Oct. 11, 1917.)—Medicinal preparations for treatment of the scalp and hair.

108,039.—Independent Drug Co., Chicago, Ill. (Filed Dec. 18, 1917. Used since 1909.)—Perfumes, toilet water, creams for skin, face-powder, toilet powder, talcum powder, tooth-powder, tooth-paste, bath-salts, rouge, hair-curling fluids, hair-tonics, eyebrow-pencils and brilliantine.

108,122.—J. T. Fargason Company, Memphis, Tenn. (Filed Dec. 24, 1917. Used since Aug. 10, 1917.)—Flavoring extracts for foods.

108,143.—Leon E. Faehner, New York, N. Y. (Filed Dec. 26, 1917. Used since May 6, 1896.)—Toilet preparations, viz.: Perfumes, cosmetics and hair-restorers.

108,254.—Lever Brothers Co., Portland, Ore. (Filed Jan. 2, 1918, under ten year proviso. Used since Aug. 1, 1887.)—Soap and scouring compound.

108,373.—Calypso Company, Springfield, Mass. (Filed Jan. 9, 1918. Used since Mar. 1, 1916.)—Medicated dental cream.

108,486.—Max Block, Buffalo, N. Y. (Filed Jan. 16, 1918. Used since Jan. 4, 1918.)—Toilet lotion for relieving chapped and rough skin.

108,552.—Savannah Soap Co., Savannah, Ga. (Filed Jan. 19, 1918. Used since Dec. 17, 1917.)—Soap.

Correction of Trade-Mark Registration.

Trade-Mark Registration Applied For No. 107,571 for the Trade Mark Re-Mo-Vo was applied for in the name of the Removo Company, Syracuse, N. Y., and not the Sentinel Remedies Company, Cincinnati, Ohio, as erroneously published in our February issue.

FOREIGN CORRESPONDENCE AND MARKET REPORT

AFRICA.

NATAL CLOVE OIL.—The London *Times* reports that there is every likelihood of a new industry being established in Natal for the purpose of distilling oil from cloves brought down from Zanzibar and other East African ports. There is a large demand for clove oil for the manufacture of eugenol, used in making vanillin, and, with the Continental production cut off since the war, the British distillers have had as much business as they can manage. There is, however, the difficulty during the war of obtaining the necessary copper stills.

AUSTRALIA.

PRODUCTION OF SANDALWOOD OIL.—The Western Australian Minister for Industries has stated that a firm which has been engaged in the production of sandalwood oil has succeeded in bringing the product up to the B. P. standard.

BERMUDA.

CONTROL OF SOAP, ETC.—The powers conferred upon the newly organized Bermuda Supply Control Board are to be exercised in connection with the trade in soaps, kerosene oil and imported fertilizers. The Governor of Bermuda, by proclamation of February 6, placed these articles under the control of the board. The issuing of import licenses and the regulation of the export, sale and consumption of goods are included among the powers that may be exercised by the board.

FRANCE.

PERFUMERY TRADE.—In view of the Germanophile tendencies displayed in the Scandinavian countries, and also in Holland, it is reported that the French Government has been compelled to forbid all business with those countries. This step is considered in some quarters as too sweeping, including various goods that might easily have continued to be exported. Among such are mentioned perfumery and allied specialties, for which the Scandinavian countries were large and steady buyers. The prohibition to trade is reported to be paralyzing the French perfumery industry, depriving the State of an important source of revenue, throwing people out of work, and enabling other nations to enter the markets in question. These facts are now being called to the notice of the Government with a view to obtaining permission to trade in all goods that would have no bearing upon the continuance of the war.

ESSENTIAL OIL EXPANSION IN FRANCE.—At the annual general meeting of Antoine Chiris & Jeancard Fils the capital of the company was increased by the decision of the shareholders, from fourteen million to twenty million francs. This increase was decided upon on account of the rapid increase in the volume of the business transacted, and for the purpose of extending the energies of the firm in the direction of the manufacture of chemical and pharmaceutical products, especially in its new works at Baus-Roux (Alpes-Maritimes), which have recently been built. The style of the firm has also been altered, and it will in future

Continued on page 24.

THE MARKET.

Essential Oils, Aromatic Chemicals, Etc.

Business in the market for essential oils and perfumery products in general has not bulked large during the interval, but a good jobbing inquiry has persisted and the list discloses numerous upward revisions throughout. Many products have risen to unprecedented new high levels owing to shortages of new materials, while the Far and Near East products have been held at generally higher levels due to transportation conditions.

Canada snake root oil furnishes a striking example of shortages forced upon essential oil distillers in raw material supplies. This oil has risen from a level of \$8.50@ \$9.00 a pound to \$15.00@21.00 a pound due to the extremely high prices named on the little root available. West Indian sandalwood oil has been entirely taken up, but a substitute bearing a true reflection of the genuine article has made its appearance at \$6.00 a pound.

Almond essential oil has moved up to new high levels with \$13.00 a pound quoted on the bitter and \$13.50 on the F. P. A. Oil of cassia has been perhaps the strongest article on the list with advances of 10 to 50 cents noted on the technical and redistilled grades. A greater scarcity has developed in cananga oils with an advance of 25 cents named in the Java and 15 cents in the redistilled variety, following an advance to 60 francs in the French market. Amber oil has recorded a net advance approximating 10 cents a pound.

The rose products have remained firm with the single exception of oil of rose which has declined a dollar on the French and Bulgarian descriptions to \$24.00 a pound. More interest has developed on the geranium oils in general with the Turkish palma rosa quoted in some hands at \$4.75@5.00 a pound, although \$4.30 was named in other hands. African geranium oil has ruled strong on the basis of \$6.25 as there has been little possibility of getting freight. Lavender oils have developed additional scarcity and dealers are now naming firm prices.

The Sicilian oils have attracted fair interest and the latest reports from Messina are that owing to more favorable rates of exchange lemon oil has advanced abroad. It is possible to buy lemon in this market at 95 cents however. The orange oil market has developed further weakness with offers of "bitter" down to \$1.85@2.00 a pound and the sweet Italian variety down to \$2.60@2.75 a pound. Distilled lime oil has been cut to the extent of 20 cents a pound on competition. Bergamot remains in much the same position with offers at \$5.75@6.00 for the genuine article.

While oil of peppermint has not been plentiful at the source, conditions of transportation have been unsatisfactory and the oil has registered a net decline approximating 25 cents a pound. Despite the weakness of the spot market some dealers are bullish in their views owing to a probable curtailment of this season's acreage. Conditions in spearmint are much the same as in peppermint.

In the market for aromatic chemicals interest attaches to a 25 cent advance in anethol; a 50 cent advance in terpinyl acetate; and a 5 cent advance in terpineol acetate. So far as jobbers are concerned coumarin has been extremely scarce although first hands have been offering at \$24.00@25.50 a pound. Domestic citronellol has advanced to \$24.00.

Vanilla Beans.

While all signs point to a decided curtailment in the production of Mexican vanilla beans, latest indications pointing to a crop of not more than 150,000 pounds of whole beans against a normal crop of 350,000 pounds and a crop of about 50,000 pounds of cuts against the average of 60,000 pounds, the approach of the time when new crop

(Continued on page 24.)

PRICES IN THE NEW YORK MARKET

(Quotations on this page are those made by local dealers, but are subject to revision without notice because of the unstable conditions created by the European War)
 (See last page of Soap Section for Prices on Soap Materials.)

ESSENTIAL OILS.

| | | | | | |
|-----------------------------------|---------------------------------|--|-------------|--|-------------|
| Almond | Bitter...per lb...\$13.00-13.25 | Orange, sweet, Italian..... | \$2.60-2.75 | Cumarin, natural | nominal |
| " | F. P. A.....13.50-14.00 | " sweet, W't Indian..... | 1.80-2.00 | " artificial, domestic \$24.00-27.00 | |
| " | Artificial.....5.00-5.50 | Origanum | .21-.25 | " artificial, foreign.. | |
| " | Sweet True.....1.00-1.05 | Orris Root, concrete, for- eign | 5.15-5.25 | Diphenylmethane | nominal |
| " | Peach-Kernel.....35 | Orris Root, concrete, do- mestic | 4.50-5.00 | Diphenyloxide | 5.00 |
| Amber, Crude | 1.30-1.50 | Orris Root, absolute..(oz.) | 40.00-45.00 | Ethyl Cinnamate | nominal |
| " Rectified | 1.75-1.85 | Parsley | 8.00 | Eucalyptol | 1.40-1.50 |
| Anise | 1.10-1.15 | Patchouly | 28.00-30.00 | Heliotropine, domestic | 5.75-6.00 |
| " Lead free | 1.20-1.25 | Pennyroyal, American | 1.65-1.75 | Eugenol | 5.00-5.25 |
| Aspic (Spike) | .80-1.40 | " French | 1.35-1.40 | Geraniol, domestic | 5.25-5.50 |
| Bay, Porto Rico | 2.40-2.50 | Peppermint | 3.00-3.45 | " foreign | |
| Bergamot, 35-36%..... | 5.75-6.00 | " redistilled | 3.20-3.45 | Geranyl Acetate | 7.75-8.00 |
| Birch (Sweet) | 2.30-2.50 | " twice rectified | 3.75-3.90 | " foreign | nominal |
| Bois de Rose, Femelle..... | 4.50-4.75 | Petit Grain, South Ameri'n | 3.50-3.75 | Indol, C. P.....(oz.) | nominal |
| Cade | 1.00-1.15 | Pimento | 6.50-8.00 | Iso-Butyl-Salicylate | nominal |
| Cajeput | .75-.85 | Pine Needles, from Pinus Sylvestus | 2.85-3.00 | Iso-Eugenol | 8.50 |
| Calamus | 3.25-3.50 | Rue | 2.25- — | Linalol, from bois de rose | 6.00-7.00 |
| Camphor, Japanese, "white" | .18-.20 | Sage | 4.00-4.50 | Linalyl Acetate | |
| Cananga, Java | 5.60-5.65 | Safrol | 4.25 | " Benzoate | nominal |
| " Rectified | 6.00-6.15 | Sandalwood, East India... | 13.50-14.00 | Methyl Anthranilate | nom. 65.00 |
| Caraway Seed | 8.00-8.50 | " West India | nominal | " Cinnamate | 7.25 |
| Cardamom | 27.50 | Sassafras, artificial..... | .30 | " Heptenone | 10.00-12.00 |
| Carvol | 15.00 | " natural | 1.70 | " Heptene Carbonate | nominal |
| Cassia, 75-80% Technical | 1.75-1.80 | Savin, French | 6.00-6.50 | " Paracresol | 16.00 |
| " Lead Free | 1.80-2.25 | Snake Root | 15.00-21.00 | " Salicylate | 85-95 |
| " Redistilled | 2.25-2.50 | Spearmint | 3.50-3.60 | Mirbane, rect. drums | 21-22 |
| Cedar Leaf | 1.10-1.25 | Spruce | 1.20-1.25 | Musk Ambrette | 75.00 |
| " Wood | .18-.20 | Tansy | 3.50- — | " Ketone | 50.00 |
| Celery | 20.00-22.00 | Thyme, French, red | 1.75-1.80 | " Xylene | 25.00 |
| Cinnamon, Ceylon | 20.00-22.00 | " white | 1.90-2.05 | Nonylic Alcohol | nominal |
| Citronella, Ceylon | .51-.53 | Vetiver Bourbon | 1.65-1.70 | Phenylacetaldehyde | 70.00 |
| " Java | .75-.85 | Wintergreen, (genuine gaul- theria) | 14.00 | Phenylethylic Alcohol | 45.00 |
| Cloves, Zanzibar | 3.25-3.35 | Wormseed | 4.25-4.50 | Phenylacetic Acid | nominal |
| " Bourbon | 4.00-4.10 | Ylang-Ylang, Bourbon | 12.00-15.00 | Rhodinol, domestic | nominal |
| Copaiba | 1.05-1.10 | " Manila | 26.00-32.00 | " foreign | 25.00- — |
| Coriander | 22.00-22.50 | AROMATIC CHEMICALS. | | Skatol, C. P.....(oz.) | nominal |
| Croton | 1.35 | Acetophenone | nominal | Terpineol, domestic | .50-.60 |
| Cubeb | 7.00-7.25 | Amyl Salicylate, domestic | 2.75-3.50 | Terpinyl Acetate | 3.25 |
| Cumin | 9.00-11.00 | " foreign | 7.00-8.00 | Thymol | 16.00-16.50 |
| Erigeron | 1.75-2.00 | Anethol | 2.75-3.00 | Vanillin | .85-.90 |
| Eucalyptus, Australian, 70% | .60-.65 | Anisic Aldehyde | 6.40-6.75 | Violet, Artificial | 10.00-12.00 |
| Fennel, Sweet | 3.75-4.50 | Benzaldehyde, domestic | 4.25- — | BEANS. | |
| Geranium, African | 6.25 | " F. F. C., | | Tonka Beans, Angostura | .90-1.00 |
| " Bourbon | 6.00 | domestic | | " Para | .65-.70 |
| " Turkish (palma rosa) | 4.30-5.00 | Amyl Salicylate, domestic | nominal | Vanilla Beans, Mexican | 5.25-6.25 |
| Ginger | 8.00-8.25 | " foreign | 2.75-3.50 | " Cut | 3.75-4.00 |
| Gingergrass | 2.15 | Anethol | nominal | " Bourbon | 2.10-3.00 |
| Guaiac (Wood) | 6.00-6.25 | Benzyl Acetate, domestic | 5.00-5.50 | " Tahiti | 1.50-1.60 |
| Hemlock | 1.20-1.35 | " foreign | 5.00-5.50 | SUNDRIES. | |
| Juniper Berries, Rectified | 13.00-13.25 | Benzyl Alcohol | 5.00-5.50 | Alcohol, cologne spirits, gal. | 4.90-5.00 |
| Lavender, English | 24.00 | Benzyl Aldehyde | 5.00-5.50 | Ambergris, black | 12.00-15.00 |
| " Fleurs | 5.25-5.50 | Benzaldehyde, domestic | nominal | " gray | 25.00-28.00 |
| " Spanish | .95-.98 | Bornol | 4.00 | Chalk precipitated | .05-10 |
| Lemon | 1.05-1.10 | Bornyl Acetate | 4.50 | Civet, horns | 2.50-2.65 |
| Lemongrass | 1.35-1.45 | Bromostyrol | nominal | Lanolin | .50-.75 |
| Limes, distilled | 2.10-2.25 | Cinnamic Acid | nominal | Menthol | 3.25-3.40 |
| " expressed | 5.50-5.75 | " Alcohol | nominal | Musk, Cab., pods | 19.00-20.00 |
| Linaloe | 2.85-3.00 | " Aldehyde | nominal | " grains | 22.00-25.00 |
| Mace, distilled | 2.30-2.50 | Borneol | nominal | " Tonquin, pods | 29.00- — |
| Mustard, genuine | 30.00-32.00 | Bornylacetate | nominal | Orris Root, Florentine, whole | .18-.19 |
| " artificial | 22.00-22.50 | Bromostyrol | nominal | Orris Root, powd. and gran | .22-.23 |
| Neroli, petale..... | 60.00-90.00 | Cinnamic Acid | nominal | Rice starch | .24% |
| " artificial | 18.00-24.00 | " Aldehyde | nominal | Talc, Italian | 55.00 |
| Nutmeg | 2.25-2.35 | Citral | 3.25-3.40 | " French | 15.00-22.00 |
| Opopanax | nominal | " C. P. | 3.75 | " Domestic | 10.00-13.00 |
| Orange, bitter | 1.85-2.00 | Citronellol, domestic | nom. 24.00 | | |
| | | " foreign | 24.00- — | | |

THE MARKET.

(Continued from page 22.)

goods are expected to appear on the market has had the usual bearish influence.

Thus far there has been no trading in bulk lots in the primary market with the result that there is no stability of quotations on Mexican beans. However, as ordinary beans are usually the ones which arrive in this market first of all there has been considerable trading on a to arrive basis and the general trend of the market has been downward as competitive selling has brought out sales of ordinary quality on a to arrive basis of as low as \$4.00@4.25 for whole beans. These quotations are hardly a fair criterion, however, as the majority of sellers have maintained their views within the range of \$4.75@6.00 a pound for whole beans, and \$3.50@4.00 for the cuts.

As previously pointed out, no New York operators have as yet come into the market in Mexico to any extent principally because of the lateness of the crop. Reports from crop sections in Mexico indicate that the Indian who would in ordinary years have gathered the vanilla beans say by November or December has not yet brought in any appreciable quantities of the crop.

The action of the Teutonic forces in forcing their passage down to Black Sea ports has forced a materially firmer feeling in the market for Bourbon vanilla beans so much so that there has been an advance of two francs in the Marseilles market. This has forced the quotation in this market to about \$2.05@2.07 a pound cost and dock New York, so that good sound free goods have been selling here on a basis of \$2.10 a pound with occasional price shading from some houses down to \$1.95@2.00. Were it not for the weakness which has been shown in Mexican beans, it is thought that the Bourbon would by this time be quoted on a materially firmer basis. As it is, it has been made clear that Bourbon beans cannot be brought over successfully from France and such arrivals as have taken place and are scheduled to arrive are being held at firm prices.

The market on Tahiti beans has had somewhat of a reaction. Reports from the Pacific Coast indicate that offers have been made down to a basis of \$1.00 a pound so that offers locally have been made down to \$1.00@1.35 a pound. Latest advices from vanilla bean centres in South America, report that the crop is expected to be large and will undoubtedly come on the market at lower prices.

DEVELOPMENT OF ORANGE OIL INDUSTRY IN JAMAICA.

(Continued from page 11.)

EFFORTS TO MAINTAIN QUALITY.

It is reported that there is a general impression in Jamaica that if the industry of putting up orange oil gets into many hands and the shipping and marketing are independently handled without co-operation the trade will suffer. It is said to be considered quite necessary that the oil sent abroad should be kept up to as high and uniform a standard as possible, for if inferior grades are shipped on the chance of finding a market the result will be not only a probable loss to the individual shipper but an indirect loss to all shippers. It is not an article the consumption of which can be greatly stimulated by cheapness, and from the viewpoint of the producers it would probably be more advantageous to market limited quantity at good prices than a large quantity at low prices. The latter would probably lead to price cutting, careless production, and the shipping of a poor product to foreign markets.

By far the greater amount of orange oil produced in Jamaica is of the sweet variety. Bitter orange oil is produced in exactly the same way as the sweet oil, except that the bitter oil is obtained from the Seville or sour orange, and is not as valuable as the sweet oil. When the latter is being sold at \$1.75 a pound, the producer of bitter oil counts himself fortunate if he succeeds in obtaining \$1.25. The bitter oil is used also to flavor cakes and biscuits and, to a lesser degree, in the preparation of perfumes and essences.

PRODUCTION OF VOLATILE OILS.

(Continued from page 9.)

the outcome of the department's work on camphor, several large commercial enterprises have been undertaken.

Among the many species of plants which are now being studied in our several experimental gardens are those yielding the following oils:

| | | |
|------------|------------|-------------|
| Anise | Fennel | Peppermint |
| Basil | Galangal | Rose |
| Cajeput | Geranium | Rosemary |
| Calamus | Ginger | Sage |
| Camphor | Horsemint | Spearmint |
| Caraway | Lavender | Tansy |
| Cassia | Lemongrass | Thyme |
| Chamomile | Marjoram | Vetiver |
| Citronella | Orange | Wormseed |
| Cumin | Palmarosa | Wormwood |
| Curcuma | Pennyroyal | Ylang Ylang |
| Eucalyptus | | |

In so far as time and means permit, the cultural requirements of promising perfumery plants will be worked out and their commercial possibilities in the United States determined. I trust that the results will not be without interest to the members of the Manufacturing Perfumers' Association.

FOREIGN CORRESPONDENCE.

(Continued from page 22.)

be the Compagnie des Produits Aromatiques, Chémiques, et Medicinaux. M. G. Chiris remains as president of the company.

GREAT BRITAIN.

EMBARGO PROHIBITIONS.—Ambergris and tooth-brushes have been added to the British embargo list.

GREECE.

OLIVE CROP SMALL IN 1917.—Vice Consul C. M. Corafa, Athens, reports that the Greek olive crop and olive-oil yield has been seriously under the average. As a striking confirmation of this shortage may be noted the recent action of the Ministry of Revictualling and Supplies, which has raised the minimum price of olive oil from \$1.76 per gallon to \$2.08 per gallon. The price fixed from October of \$1.09 per gallon for olives has been increased to \$1.32 per gallon. While it is possible that there is some hoarding of olive oil and olives in the provinces, according to the most optimistic estimate the olive-oil crop is perhaps 15 per cent. short, and the olive crop 10 per cent. below the normal production.

ITALY.

OLIVE OIL.—Naples advices, dated February 4, say: "According to information received by the Societa Nazionale degli Olivicoltori (National Society of Olive Growers), the olive crop in Apulia, the most important region of olive growing, gave an exceedingly disappointing result, the yield being estimated at only about one-fifth of the abundant production of 1916."

PORTUGAL.

EXPORT PROHIBITION.—A decree of January 24 forbids the export of resins of all kinds.



HEARING ON ROSIN GRADE BILL

The bill of Representative Harrison of Mississippi to provide for government establishment of grades of rosin and other naval stores has been referred to a special subcommittee of the House Committee on Agriculture, of which Representative Candler of Mississippi is chairman. This action was taken following a hearing held on the bill before the full committee on agriculture. Representative Harrison says he hopes to obtain early and favorable consideration of his bill by the subcommittee, the full committee and by both houses of congress.

At the hearing Mr. Harrison told the committee that the bill was favored unanimously by the producers of rosin and turpentine. The production of these articles, he said, amounts to \$35,000,000. The trade, he said, is hampered by the fact that adulterated products are sold. Under his bill naval stores would have to conform to specified government standards. For several years the department of agriculture has been working on an investigation tending towards the grading of rosin and turpentine.

Mr. Harrison introduced C. F. Speh, secretary and manager of the Rosin Producers' Association, with headquarters at New Orleans. Mr. Speh said among other things:

"There is no legal standard and no standard by which any one can compel a man to ship to him the grade which he has purchased, and that has brought about a condition of unfair competition, namely, a man who is buying or offering to sell one particular grade meets in competition a lower price, because the other man is going to ship a lower grade, which he will be able to purchase at a lower price."

SUGAR AND SOAP.

In announcing the presentation recently of four important contributions bearing upon various aspects of the sugar industry, the *Journal of Industrial and Engineering Chemistry* says: "It may be well in this connection to call attention to the use of sugar in the manufacture of soap, to produce transparency. For this purpose from five to ten per cent. of sugar is added. Its function is purely an aesthetic one; a transparent soap delights the eye, but how pleasing to the palate would have been that extra lump of sugar, without which we have gone for months. This is a day of demarcation of essentials and non-essentials, and surely the transparent quality of soap is not essential in attaining that cleanliness which, according to the proverb, is next to godliness."

NEW SOURCES OF OIL.

(Zeitschrift für Angewandte Chemie., vol. 30, 1917, pp. 295-296.)

The German War Committee for Vegetable and Animal Oils and Fats sends us the following:

In the article "New Sources of Oil" which appeared in

your esteemed paper (vol. 30, I, p. 221, 1917), its writers report the results of their investigations of a series of plant seeds. In their opinion the utilization of those seeds would be of importance for the production of oil, not only at the present time but also partly in the economy of the time after the war's end. All those seeds have long been of interest to the War Committee for Vegetable and Animal Oils and Fats, which finds that one of its most important tasks is to consider every possible kind of domestic raw-products, which could be of positive utility to public economy in the field of oils and fats. The study of the utilization of vegetable substitutes for the production of oil was given to a special commission of scientific experts, appointed by the above-named War Committee. This commission investigated with exceeding care all those questions under the chairmanship of the Imperial Board of Health. From among the plant seeds investigated by the writers of the article in question, only the seeds of the pine (fir) and that of the acacia (*Rabinia pseudo-acacia*) have been utilized as valuable domestic sources of oil.

In making this selection the considerations were, not only the oil content of the different plant seeds, the quality of the oil produced and the value of the residue, but especially the possibility of obtaining sufficient quantities by means of a gathering organization to yield volumes of oil that would be of importance to our fat balance. When the writers of the article in question mention that even the horse chestnut, poor in oil, has proved itself to be a paying raw material for oil, their opinion is in error. Because the gathering and utilization of the horse chestnut was not undertaken alone from the standpoint of oil production—there being only a fat content of 3½% in the fresh horse chestnut and an average of 6%-7% in the dried horse chestnut, with a 10% water content, which would not have warranted its treatment for oil alone. The deciding factor in the utilization of the horse chestnut was its yield in crude saponin of 12% in the dried fruit, and the considerably increased food value of the residue after the disembling and desaponification of the peeled fruit. Also it must be pointed out that the War Committee has been only lately in the position to issue a call for gathering acacia seeds, after the firm of Zmitz's widow was successful in producing coffee and cocoa substitutes out of the seed residue after the oil had been extracted by the aid of benzine; so that the acacia seed, aside from yielding edible oil, can now be made doubly useful as a human nourishment. The average oil yield of 12% by means of extraction could, in view of the rather limited harvest quantities, not have been alone the determining factor for this step.

To gather the seeds of the stone-pine (15% oil), which grows in Germany only on the crest and ridges of the giant mountains, would have been futile, because the seed quantity that could be obtained is entirely insufficient.

(Continued on pages 31.)

TENTATIVE STANDARD METHODS FOR THE SAMPLING AND ANALYSIS OF COMMERCIAL FATS AND OILS

Adopted: September 22, 1916; January 13, 1918.

Issued by the Committee on the Analysis of Commercial Fats and Oils of the Division of Industrial Chemists and Chemical Engineers of the American Chemical Society.

Published by the committee, Chicago, February, 1918.

COMMITTEE ON THE ANALYSIS OF COMMERCIAL FATS AND OILS.

W. J. Gascoyne, W. J. Gascoyne & Co., Baltimore.

*I. Katz, Wilson & Co., Chicago.

*A. Lowenstein, A. Lowenstein, Chicago.

H. J. Morrison, Procter & Gamble Co., Ivorydale, O.

J. R. Powell, Armour Soap Works, Chicago.

R. J. Quinn, Midland Chemical Co., Argo, Ill.

W. D. Richardson, Swift & Co., Chicago.

P. Rudnick, Armour & Co., Chicago.

L. M. Tolman, Wilson & Co., Chicago.

*E. Twitchell, Emery Candle Co., Cincinnati.

J. J. Vollertsen, Morris & Co., Chicago.

*Resigned.

TENTATIVE STANDARD METHODS FOR THE SAMPLING AND ANALYSIS OF COMMERCIAL FATS AND OILS.

Adopted September 22, 1916, and January 13, 1918.

Published by the committee February, 1918. Superseding and cancelling previous issues.

The following methods have been adopted by the committee on the Analysis of Commercial Fats and Oils of the Division of Industrial Chemists and Chemical Engineers of the American Chemical Society as tentative standards for the use of the trade, pending their official adoption by the American Chemical Society.

They are the result of three years' continuous and conscientious effort on the part of the committee, and they have given excellent satisfaction in the hands of the members of the committee and others who have used them, and have been found to answer the commercial needs of the fat and oil industry in a satisfactory manner.

They are published for the purpose of adoption by any contracting parties so desiring and for the purpose of eliciting suggestions and criticisms from fat and oil chemists. Communications on the subject of the methods should be addressed to W. D. Richardson, care Swift & Company, Chicago, and will be presented to the committee at their regular monthly meeting next following.

The committee is now working on methods for cold and flow tests, melting point, and moisture in oils of the coconut group in the presence of free acids.

TANK CARS—SAMPLING.

1. Sampling while loading.

Sample shall be taken at discharge of pipe where it enters tank car dome. The total sample taken shall be not less than 50 pounds and shall be a composite of small samples of about one pound each, taken at regular intervals during the entire period of loading.

The sample thus obtained is thoroughly mixed and uniform 3-pound portions placed in air-tight 3-pound metal containers. At least three such samples shall be put up, one for the buyer, one for the seller and the third to be sent to a referee chemist in case of dispute. All samples are to be promptly and correctly labeled and sealed.

2. Sampling from car on track.*

*Live steam must not be turned into tank cars or coils before samples are drawn, since there is no certain way of telling when coils are free from leaks.

(a) When contents are solid.

In this case the sample is taken by means of a large tryer measuring about 2 inches across and about $1\frac{1}{2}$ times the depth of the car in length. Several tryer-fulls are taken vertically and obliquely toward the ends of the car until 50 pounds are accumulated when the sample is softened, mixed and handled as under No. 1. In case the contents of the tank car have assumed a very hard con-

dition as in winter weather, so that it is impossible to insert the tryer and it becomes necessary to soften the contents of the car by means of the closed steam coil (in nearly all tank cars the closed steam coil leaks) or by means of open steam in order to draw a proper sample, suitable arrangements must be made between buyer and seller for the sampling of the car after it is sufficiently softened, due consideration being given to the possible presence of water in the material in the car as received and also to the possible addition of water during the steaming. The committee knows of no direct method for sampling a hard-frozen tank car of tallow in a satisfactory manner.

Note: If there is water present under the solid material this must be noted and estimated separately.

(b) When contents are liquid.

The sample taken is to be a 50-pound composite made up of numerous small samples taken from the top, bottom and intermediate points by means of a bottle or metal container with removal stopper or top. This device attached to a suitable pole is lowered to the various desired depths when the stopper or top is removed and the container allowed to fill. The 50-pound sample thus obtained is handled as under No. 1.

(c) When contents are in semi-solid condition, or when stearine has separated from liquid portions.

In this case a combination of (a) and (b) may be used or by agreement of the parties the whole may be melted and procedure (b) followed.

BARRELS, TIERCES, CASKS, DRUMS AND OTHER PACKAGES.

All packages shall be sampled, unless by special agreement the parties arrange to sample a lesser number; but in any case not less than 10 per cent of the total number shall be sampled. The total sample taken shall be at least 20 pounds in weight for each 100 barrels, or equivalent.

1. Barrels, Tierces and Casks.

(a) When contents are solid.

The small samples shall be taken by a tryer through the bunghole or through a special hole bored in the head or side for the purpose, with a 1-inch or larger auger. Care should be taken to avoid and eliminate all borings and chips from the sample. The tryer is inserted in such a way as to reach the head of the barrel, tierce or cask. The large sample is softened, mixed and handled according to Tank Cars, No. 1.

(b) When contents are liquid.

In this case use is made of a glass tube with constricted lower end. This is inserted slowly and allowed to fill with the liquid, when the upper end is closed and the tube withdrawn, the contents being allowed to drain into the sample container. After the entire sample is taken it is thoroughly mixed and handled according to Tank Cars, No. 1.

(c) When contents are semi-solid.

In this case the tryer or a glass tube with larger outlet is used depending on the degree of fluidity.

(d) Very hard materials, such as natural and artificial stearines.

By preference the barrels are stripped and samples obtained by breaking up contents of at least 10 per cent of the packages. This procedure is to be followed also in the case of cakes shipped in sacks. When shipped in the form of small pieces in sacks they can be sampled by grab sampling and quartering. In all cases the final procedure is as outlined under Tank Cars, No. 1.

2. Drums.

Samples are to be taken as under No. 1, use being made of the bunghole. The tryer or tube should be sufficiently long to reach to the ends of the drum.

3. Other Packages.

Tubs, pails and other small packages not mentioned above are to be sampled by tryer or tube (depending on fluidity) as outlined above, the tryer or tube being inserted diagonally whenever possible.

4. Mixed Lots and Packages.

When lots of tallow or other fats are received in packages of various shapes and sizes, and especially wherein the fat itself is of variable composition, such must be left to the judgment of the sampler. If variable, the contents of each package should be mixed as thoroughly as possible and the amount of the individual samples taken made proportional to the sizes of the packages.

ANALYSIS—SAMPLE.

The sample must be representative and at least three pounds in weight and taken in accordance with the Standard Methods for the Sampling of Commercial Fats and Oils. It must be kept in an air-tight container in a dark, cool place.

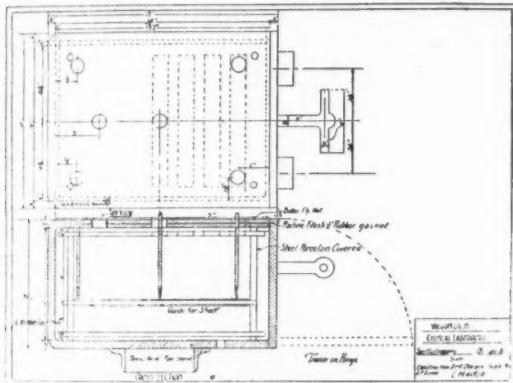
Soften the sample if necessary by means of a gentle heat, taking care not to melt it. When sufficiently softened, mix the sample thoroughly by means of a mechanical egg-beater or other equally effective mechanical mixer.

MOISTURE AND VOLATILE MATTER.

Apparatus:

Vacuum Oven—The Committee Standard Oven.

Description.—The Standard F. A. C. Vacuum Oven has been designed with the idea of affording a simple and compact vacuum oven which will give as uniform temperatures as possible on the shelf. As the figure shows, it consists of an iron casting of rectangular sections with



VACUUM OVEN DESIGNED TO PROVIDE UNIFORM TEMPERATURES THROUGHOUT AND OVER ENTIRE SINGLE SHELF.

hinged front door made tight by means of a gasket and which can be lowered on opening the oven so as to form a shelf on which samples may be rested. The oven contains but one shelf which is heated from above as well as below by means of resistance coils. Several thermometer holes are provided in order to ascertain definitely the temperature at different points on the shelf. In a vacuum oven where the heating is done almost entirely by radiation it is difficult to maintain uniform temperatures at all points, but the F. A. C. oven accomplishes this rather better than most vacuum ovens. Larger ovens containing more than one shelf have been tried by the committee, but have been found to be lacking in temperature uniformity and means of control. The entire oven is supported by means of a 4-inch standard pipe which screws into the base of the oven and which in turn is supported by being screwed into a blind flange of suitable diameter which rests on the floor or work table.

F. A. C. OVEN.

Moisture Dish.—A shallow glass dish, lipped, beaker form, approximately 6-7 cm. diameter and 4 cm. deep shall be standard.

Determination.—Weigh out five grams (± 0.2 gram) of the prepared sample into a moisture dish. Dry to constant weight in vacuo at a uniform temperature, not less than 15° C. not more than 20° C above the boiling point of water at the working pressure, which must not ex-

ceed 100 mm. of mercury.* Constant weight is attained when successive dryings for one hour periods show an additional loss of not more than 0.05%. Report loss in weight as Moisture and Volatile Matter.**

*Boiling point of water at reduced pressures.

| Pressure mm Hg. | Boiling Point to 1° C. | Boiling Point $Plus 15^\circ$ C. | Boiling Point $Plus 20^\circ$ C. |
|--------------------|-------------------------------------|--|--|
| 100 | 52° C. | 67° C. | 72° C. |
| 90 | 50 | 65 | 70 |
| 80 | 47 | 62 | 67 |
| 70 | 45 | 60 | 65 |
| 60 | 42 | 57 | 62 |
| 50 | 38 | 53 | 58 |
| 40 | 34 | 49 | 54 |

**Results comparable to those of the Standard Method may be obtained on most fats and oils by drying five gram portions of the sample, prepared and weighed as above, to constant weight in a well constructed and well ventilated air oven held uniformly at a temperature of $155-110^\circ$ C. The thermometer bulb should be close to the sample. The definition of constant weight is the same as for the Standard Method.

The vacuum oven method cannot be considered accurate in the case of fats of the coconut oil group containing free acid, and the committee recommends that it be used only for oils of this group when they contain less than 1% free acid. In the case of oils of this group containing more than 1% free acid, recourse should be had temporarily to the routine control method for moisture and volatile matter* until the committee develops a more satisfactory method.

The air oven method cannot be considered even approximately accurate in the case of the drying and semi-drying oils and those of the coconut oil group. Therefore, in the case of such oils as cottonseed oil, maize oil (corn oil), soya bean oil, linseed oil, coconut oil, palm kernel oil, etc., the vacuum oven method should always be used, except in the case of fats of the coconut group containing more than 1% free acid as noted above.

INSOLUBLE IMPURITIES.

Dissolve the residue from the moisture and volatile matter determination by heating it on a steam bath with 50 cc. of kerosene. Filter the solution through a Gooch crucible properly prepared with asbestos,** wash the insoluble matter five times with 10 cc. portions of hot kerosene and finally wash the residual kerosene out thoroughly with petroleum ether. Dry the crucible and contents to constant weight as in the determination of moisture and volatile matter and report results as Insoluble Impurities.

*The following method is suggested by the committee for routine control work:

Weigh out five to twenty-five gram portions of prepared sample into a glass or aluminum (Caution: Aluminum soap may be formed) beaker or casserole and heat on a heavy asbestos board over burner or hot plate, taking care that the temperature of the samples does not go above 130° C. at any time. During the heating rotate the vessel gently on the board by hand to avoid sputtering or too rapid evolution of moisture. The proper length of time of heating is judged by absence of rising bubbles of steam, by the absence of foam or by other signs known to the operator. Avoid overheating of sample as indicated by smoking or darkening. Cool in desiccator and weigh.

**For routine-control work, filter paper is sometimes more convenient than a prepared Gooch crucible. It must be very carefully washed to remove the last traces of fat, especially the rim.

SOLUBLE MINERAL MATTER.

Place the combined kerosene filtrate and kerosene washings from the insoluble impurities determination in a platinum dish. Place in this an ashless filter paper folded in the form of a cone, apex up. Light the apex of the cone, whereupon the bulk of the kerosene burns quietly. Ash the residue in a muffle, to constant weight, taking care that the decomposition of carbonates is complete, and report the result as Soluble Mineral Matter.* When the percentage of soluble mineral matter amounts to more than 1% multiply the percentage by 10 and add this amount to the percentage of free fatty acids as determined.

*For routine work an ash may be run on the original fat, and the soluble mineral matter obtained by deducting the ash on the insoluble impurities from this. In this case the Gooch crucible should be prepared with an ignited asbestos mat so that the impurities may be ashed directly after being weighed. In all cases ignition should be to constant weight so as to insure complete decomposition of carbonates.

FREE FATTY ACIDS.

Alcohol **

The alcohol used shall be approximately 95% ethyl alcohol freshly distilled from sodium hydroxide, which with phenolphthalein gives a definite and distinct end point.

Determination.—Weigh 1-15 grams of the prepared sample into an Erlenmeyer flask, using the smaller quantity in the case of dark colored, high acid fats. Add 50-100 cc. hot, neutral alcohol, and titrate with N/2, N/4 or N/10 sodium hydroxide, depending on the fatty acid content, using phenolphthalein as indicator. Calculate to oleic acid, except that in the case of palm oil the results may also be expressed in terms of palmitic acid, clearly indicating the two methods of calculation in the report. In the case of coconut and palm kernel oils, calculate to and report in terms of lauric acid in addition to oleic acid, clearly indicating the two methods of calculation in the report. In the case of fats or greases containing more than 1% of soluble mineral matter, add to the percentage of free fatty acids as determined 10 times the percentage of soluble mineral matter as determined. This addition gives the equivalent of fatty acids combined with the soluble mineral matter.

TITER.

Standard Thermometer.

The thermometer is graduated at zero and in tenth degrees from 10° C to 65° C, with one auxiliary reservoir at the upper end and another between the zero mark and the 10° mark. The cavity in the capillary tube between the zero mark and the 10° mark is at least 1 cm. below the 10° mark, the 10° mark is about 3 or 4 cm. above the bulb, the length of the thermometer being about 37 cm. over all. The thermometer has been annealed for 75 hours at 450° C, and the bulb is of Jena normal 16''' glass, or its equivalent, moderately thin, so that the thermometer will be quick acting. The bulb is about 3 cm. long and 6 mm. in diameter. The stem of the thermometer is 6 mm. in diameter and made of the best thermometer tubing, with scale etched on the stem, the graduation is clear cut and distinct, but quite fine. The thermometer must be certified by the U. S. Bureau of Standards.

Glycerol Caustic Solution.

Dissolve 250 grams of potassium hydroxide in 1,000 cc dynamite glycerine with the aid of heat.

Determination.—Heat 75 cc of the glycerol-caustic solution to 150° C and add 50 grams of the melted fat. Stir the mixture well and continue heating until the melt is homogeneous, at no time allowing the temperature to exceed 150° C. Allow to cool somewhat and carefully add 50 cc 30% sulphuric acid. Now add hot water and heat until the fatty acids separate out perfectly clear. Draw off the acid water and wash the fatty acids with hot water until free from mineral acid, then filter and heat to 130° C as rapidly as possible with stirring. Transfer the fatty acids, when cooled somewhat, to a 1" by 4" titer tube, placed in a 16 ounce salt mouth bottle of clear glass, fitted with a cork which is perforated so as to hold the tube rigidly when in position. Suspend the titer thermometer so that it can be used as a stirrer and stir the fatty acids slowly (about 100 revolutions per minute) until the mercury remains stationary for thirty seconds. Allow the thermometer to hang quietly with the bulb in the center of the tube and report the highest point to which the mercury rises as the titer of the fatty acids. The titer should be made at about 20° C for all fats having a titer above 30° C and at 10° C below the titer for all other fats.

UNSAPONIFIABLE MATTER.

Extraction Cylinder.

The cylinder shall be glass stoppered, graduated at 40 cc, 80 cc and 130 cc, and of the following dimensions: diameter about 1 1/2 in., height about 12 in.

Petroleum Ether.

Redistilled petroleum ether, boiling under 75° C shall

**For routine work methyl or denatured ethyl alcohol of approximately 95 per cent. strength may be used. With these reagents the end point is not sharp.

be used. A blank must be made by evaporating 250 cc with about 0.25 gram of steafine or other hard fat (previously brought to constant weight by heating) and drying as in the actual determination. The blank must not exceed a few milligrams.

Determination.—Weigh 5 grams (\pm 0.20 gram) of the prepared sample into a 200 cc Erlenmeyer flask, add 30 cc of redistilled 95% (approximately) ethyl alcohol and 5 cc of 50% aqueous potassium hydroxide, and boil the mixture for one hour under a reflux condenser. Transfer to the extraction cylinder and wash to the 40 cc mark with redistilled 95% ethyl alcohol. Complete the transfer first with warm then with cold water till the total volume amounts to 80 cc. Cool the cylinder and contents to room temperature and add 50 cc of petroleum ether. Shake vigorously for one minute and allow to settle until both layers are clear, when the volume of the upper layer should be about 40 cc. Draw off the petroleum ether layer as closely as possible by means of a slender glass siphon into a separatory funnel of 500 cc capacity. Repeat extraction at least four more times using 50 cc of petroleum ether each time. Wash the combined extracts in a separatory funnel three times with 25 cc portions of 10% alcohol, shaking vigorously each time. Transfer the petroleum ether extract to a wide mouth tared flask or beaker, and evaporate the petroleum ether on a steam bath in an air current. Dry as in the method for Moisture and Volatile Matter. Any blank must be deducted from this weight before calculating unsaponifiable matter. Test the final residue for solubility in 50 cc petroleum ether at room temperature. Filter and wash free from the insoluble residue, if any, evaporate and dry in the same manner as before. The committee wishes to emphasize the necessity of thorough and vigorous shaking in order to secure accurate results. The two phases must be brought into the most intimate contact possible, otherwise low and disagreeing results may be obtained. When the unsaponifiable matter runs over 5%, more extractions are recommended.

WIJS METHOD FOR THE DETERMINATION OF IODINE VALUE.

Preparation of Re-agents:

1. **Wijs Iodine Solution.**—Dissolve separately 7.9 grms. of iodine trichloride, and 8.7 grms. of iodine in glacial acetic acid on the water-bath, taking care that the solutions do not absorb moisture. The two solutions are then poured into a 1,000 cc flask, and the flask is filled up to the mark with glacial acetic acid.

2. Or dissolve 6.5 grams of resublimed iodine in 1 liter of C. P. glacial acetic acid and pass in washed and dried chlorine gas until the original thiosulphate titration of the solution is just doubled. This is then preserved in amber glass stoppered bottles, sealed with paraffin until ready for use.

N/10 Sodium Thiosulphate Solution.—Dissolve 24.8 grams of chemically pure sodium thiosulphate and dilute with water to 1 liter at the temperature at which the titrations are to be made.

Starch Paste.—Boil 1 gram of starch in 200 cc of distilled water for 10 minutes and cool to room temperature.

Potassium Iodide Solution.—Dissolve 150 grams of potassium iodide in water and make up to 1 liter.

N/10 Potassium Bichromate.—Dissolve 4.903 grams of chemically pure potassium bichromate in water and make the volume up to 1 liter at the temperature at which titrations are to be made.

Standardization of the Sodium Thiosulphate Solution.—Place 20 cc of the potassium bichromate solution, to which has been added 10 cc of the solution of potassium iodide, in a glass-stoppered flask. Add to this 5 cc of strong hydrochloric acid. Dilute with 100 cc of water, and allow the N/10 sodium thiosulphate to flow slowly into the flask until the yellow color of the liquid has almost disappeared. Add a few drops of the starch paste, and with constant shaking continue to add the N/10 sodium thiosulphate solution until the blue color just disappears.

Determination.—Weigh accurately from .10 to .50 grams (depending on the iodine number) of the melted and filtered sample into a clean dry 16 oz. glass-stoppered

bottle containing 15-20 cc of carbon tetrachloride or chloroform. Add 25 cc of iodine solution from a pipette allowing to drain for a definite time. The excess of iodine should be from 50% to 60% of the amount added, that is from 100% to 150% of the amount absorbed. Moisten the stopper with a 10% potassium iodide solution to prevent loss of iodine or chlorine, but guard against an amount sufficient to run down inside of the bottle. Let the bottle stand in a dark place for one-half hour at a uniform temperature. At the end of that time add 20 cc of 10% potassium iodide solution and 100 cc of distilled water. Titrate the iodine with N/10 sodium thiosulphate solution which is added gradually with constant shaking until the yellow color of the solution has almost disappeared. Add a few drops of starch paste and continue titration until the blue color has entirely disappeared. Toward the end of the reaction stopper the bottle and shake violently so that any iodine remaining in solution in the tetrachloride or chloroform may be taken up by the potassium iodide solution. Conduct two determinations on blanks which must be run in the same manner as the sample except that no fat is used in the blanks. Slight variations in temperature quite appreciably affect the titer of the iodine solutions as acetic acid has a high co-efficient of expansion. It is, therefore, essential that the blanks and determinations on the sample be made at the same time. The number of cc of standard thiosulphate solution required by the blank, less the amount used in the determination, gives the thiosulphate equivalent of the iodine absorbed by the amount of sample used in the determination. Calculate to centigrams of iodine absorbed by 1 gram of sample ($= \%$ Iodine absorbed).

SAPONIFICATION NUMBER (KOETTSRTER NUMBER).

Preparation of Re-agents:

N/2 Hydrochloric Acid.—Carefully standardized.

Alcoholic Potassium Hydroxide Solution.—Dissolve 40 grams of pure potassium hydroxide in 1 liter of 95% redistilled alcohol (by volume). The alcohol should be redistilled from potassium hydroxide over which it has been standing for some time, or with which it has been boiled for some time, using a reflux condenser. The solution must be clear and the potassium hydroxide free from carbonates.

Determination.—Weigh accurately about 5 grams of the filtered sample into a 250-300 cc Erlenmeyer flask. Pipette 50 cc of the alcoholic potassium hydroxide solution into the flask, allowing the pipettes to drain for a definite time. Connect the flask with an air condenser and boil until the fat is completely saponified (about 30 minutes). Cool and titrate with the N/2 hydrochloric acid, using phenolphthalein as an indicator. Calculate the Koettstorfer number (mg. of potassium hydroxide required to saponify 1 gram of fat). Conduct 2 or 3 blank determinations, using the same pipette and draining for the same length of time as above.

NOTES ON THE ABOVE METHODS.

Sampling.—The standard size of sample adopted by the committee is at least three pounds in weight. The committee realizes that this amount is larger than any samples usually furnished even when representing shipments of from 20,000 to 60,000 pounds, but it believes that the requirements of a larger sample is desirable and will work toward uniform and more concordant results in analysis. It will probably continue to be the custom of the trade to submit smaller buyers' samples than required by the committee, but these are to be considered only as samples for inspection and not for analysis. The standard analytical sample must consist of three pounds or more.

The reasons for keeping samples in a dark cool place are obvious. This is to prevent an increase in rancidity and any undue increase in fatty acids. In the case of many fats the committee has found in its co-operative analytical work that free acid tends to increase very rapidly. This tendency is minimized by low temperatures.

Moisture and Volatile Matter.—After careful consideration the committee has decided that moisture is best determined in a vacuum oven of the design which ac-

companies the above report. Numerous results on check samples have confirmed the committee's conclusions. The oven recommended by the committee is constructed on the basis of well-known principles and it is hoped that this type will be adopted generally by chemists who are called upon to analyze fats and oils. The experiments of the committee indicate that it is a most difficult matter to design a vacuum oven which will produce uniform temperatures throughout, and one of the principal ideas in the design adopted is uniformity of temperature over the entire single shelf. This idea has not quite been realized in practice but, nevertheless, the present design approaches much closer to the ideal than other vacuum ovens commonly used. In the drawing above the essential dimensions are those between the heating units and the shelf and the length and breadth of the outer casting. The standard Fat Analysis Committee oven (F. A. C. oven) can be furnished by Messrs. E. H. Sargent & Company, 125 West Lake street, Chicago.

The committee realizes that for routine work a quicker method is desirable and has added one such method and has also stated the conditions under which comparable results can be obtained by means of the ordinary well-ventilated air oven held at 105 to 110° C. However, in accordance with a fundamental principle adopted by the committee at its first meeting, only one standard method is adopted and declared official for each determination.

The committee realizes that in the case of all methods for determining moisture by means of loss on heating that there may be a loss due to volatile matter (especially fatty acids) other than water. The title of the determination *Moisture and Volatile Matter* indicates this idea, but any considerable error from this source may occur only in the case of high acid fats and oils and particularly those containing lower fatty acids such as coconut and palm kernel oil, work on which is now in progress to be reported at a later date. In the case of extracted greases which have not been properly purified, some of the solvent may also be included in the moisture and volatile matter determination but inasmuch as the solvent, usually a petroleum product, can only be considered as foreign matter, for commercial purposes it is entirely proper to include it with the moisture. The committee has also considered the various distillation methods for the determination of moisture in fats and oils, but since according to the fundamental principles which it was endeavoring to follow it could only standardize one method, it was decided that the most desirable one on the whole was the vacuum oven method as given. There are cases wherein a chemist may find it desirable to check a moisture determination or investigate the moisture content of a fat or oil further by means of one of the distillation methods.

Insoluble Impurities.—This determination, the title for which was adopted after careful consideration, determines the impurities which have generally been known as dirt, suspended matter, suspended solids, foreign solids, foreign matter, etc., in the past. The first solvent recommended by the committee is hot kerosene to be followed by petroleum ether kept at ordinary room temperature. Petroleum ether, cold or only slightly warm, is not a good fat and metallic soap solvent, whereas hot kerosene dissolves these substances readily, and for this reason the committee has recommended the double solvent method so as to exclude metallic soaps which are determined below as soluble mineral matter.

Soluble Mineral Matter.—Soluble mineral matter represents mineral matter combined with fatty acids in the form of soaps in solution in the fat or oil. Formerly, this mineral matter was often determined in combination by weighing the separated metallic soap or by weighing it in conjunction with the insoluble impurities. Since the soaps present consist mostly of lime soap, it has been customary to calculate the lime present therein by taking one-tenth the weight of the total metallic soaps. The standard method as given above is direct and involves no calculation. The routine method given in the note has been placed among the methods, although not adopted as a standard method, for the reason that it is in use in some laboratories regularly. It should be pointed out, however, that the method cannot be considered accurate

for the reason that insoluble impurities may vary from sample to sample to a considerable extent and the error due to the presence of large particles of insoluble impurities is thus transferred to the soluble mineral matter.

Free Fatty Acid.—The fatty acid method adopted is sufficiently accurate for commercial purposes. In many routine laboratories the fat or oil is measured and not weighed, but the committee recommends weighing the sample in all cases. For scientific purposes the result is often expressed as "acid number" meaning the number of milligrams of KOH required to neutralize the free acids in one gram of fat, but the commercial practice has been and is to express the fatty acids as oleic acid or in the case of palm oil as palmitic acid in some instances. The committee sees no objection to the continuation of this custom so long as the analytical report clearly indicates how the free acid is expressed. For a more exact expression of the free acid in a given fat, the committee recommends that the ratio of acid number to saponification number be used. This method of expressing results is subject to error when unsaponifiable fatty matter is present, since the result expresses the ratio of free fatty acid to total saponifiable fatty matter present.

Titer.—At the present time the prices of glycerol and caustic potash are abnormally high, but the committee has considered that the methods adopted are for normal times and normal prices. For routine work during the period of high prices the following method may be used for preparing the fatty acids and is recommended by the committee:

Fifty grams of fat are saponified with 60 cc. of a solution of 2 parts of methyl alcohol to 1 of 50% NaOH. The soap is dried, pulverized and dissolved in 1,000 cc. of water in a porcelain dish and then decomposed with 25 cc. of 75% sulphuric acid. The fatty acids are boiled until clear oil is formed and then collected and settled in a 150 cc. beaker and filtered into 50 cc. beaker. They are then heated to 130°C as rapidly as possible with stirring, and transferred after they have cooled somewhat to the usual 1" x 4" titer tube.

The method of taking the titer, including handling the thermometer to be followed, is the same as that described in the standard method. Even at present high prices many laboratories are using the glycerol-caustic potash method for preparing the fatty acids, figuring that the saving of time more than compensates for the extra cost of the reagents. Caustic soda cannot be substituted for caustic potash in the glycerol method.

Unsaponifiable Matter.—The committee has considered unsaponifiable matter to include those substances frequently found dissolved in fats and oils which are not saponified by the caustic alkalies and which at the same time are soluble in the ordinary fat solvents. The term includes such substances as the higher alcohols, such as cholesterol which is found in animal fats, phytosterol found in some vegetable fats, paraffin and petroleum oils, etc. Unsaponifiable matter should not be confused in the lay mind with insoluble impurities or soluble mineral matter.

The method adopted by the committee has been selected only after the most careful consideration of other methods such as the dry extraction method and the wet method making use of the separatory funnel. At first consideration the dry extraction process would seem to offer the best basis for an unsaponifiable matter method, but in practice it has been found absolutely impossible for different analysts to obtain agreeing results when using any of the dry extraction methods proposed. Therefore, this method had to be abandoned after numerous trials, although several members of the committee strongly favored it in the beginning. Again, at first glance it would seem the use of a siphon instead of a separatory funnel would be undesirable, but as a matter of fact, in practice it is found to be more satisfactory than the separatory funnel as well as much cheaper.

Iodine Number.—The Iodine Number adopted by the committee is the well-known Wijs method. This method was adopted after careful comparison with the Hanus and Hübl methods. The Hübl method was eliminated from consideration almost at the beginning of the committee's work for the reason that the time required for complete absorption of the iodine is unnecessarily long

and in fact even after absorption has gone on over night, it is apparently not complete. In the case of the Hanus and Wijs method complete absorption takes place in from 15 minutes to an hour, depending on conditions. Formerly, many chemists thought the Hanus solution rather easier to prepare than the Wijs solution, but the experience of the committee was that the Wijs method was no more difficult to prepare than the Hanus. Furthermore, absorption of iodine from the Wijs solution appeared to take place with greater promptness and certainty than from the Hanus and was complete in a shorter time. Results by the Wijs method were also in better agreement in the case of oils showing high iodine absorption than with the Hanus solution and showed a slightly higher iodine absorption for the same length of time. However, the difference was not great. The committee investigated the question of substitution since it has been suggested that in case of the Wijs solution substitution of iodine in the organic molecule might occur, and found no evidence of this in the time required for the determination, namely, one-half hour, or even for a somewhat longer period. One member of the committee felt that it was not desirable to introduce the Wijs method into these standard methods since the Hanus method was already standardized by the Association of Official Agricultural Chemists, but the committee felt that it must follow the principle established at the commencement of its work, namely, of adopting the method which appeared to be the best from all standpoints, taking into consideration accuracy, convenience, simplicity, time, expense, etc., without allowing precedent to have the deciding vote.

POTASSIUM DETERMINATION.

(By H. J. Holzen in Chem. Wochbl. 14, 578, 1917.)

Qualitative: The flame coloration is covered already by small quantities of Na. The test after Panly Carnot is liable to error. One gr. of substance dissolved in the test tube to 1 ccm. of which is added 5 drops of a solution of 24.8 gr. of $Na_2S_2O_3$ in 50 ccm. H_2O and further 5 drops of a solution of 9.73 gr. of basic nitrate of bismuth with very little HCl in 35 ccm. H_2O , the whole after addition of 20 ccm. of abs. alcohol gives in presence of K immediately a yellow precipitate. The reaction of tartaric acid under addition of sodium acetate gives easily an over saturated solution. The Picric acid reaction, much used in the practice, easily cause error with NH_3 and should a great amount of H-ions be present does not take place. According to Piccini the δ -methyl and δ -Pipersyldervatives of dicyanodioxy hydropyridin give good results though the difficulty of the test reactions is a source of great trouble. In the absence of the heavy metals of the alkaline earths and NH_3 , 0.1 mg of K in the ccm, even in the presence of much Na, still gives a precipitate—even in organic compounds—which is insoluble in H_2O and diluted acids. Similarly are the conditions in a test with Phosphorus-Molybdic acid.

Quantitative: Platinum chloride method, the sensitivity is much impaired by the presence of Na. The Perchlorate method gives excellent results in the separation of Na and K, however the test often is Na-containing, so a blind test is required. This can be avoided by preparing $NaClO_4$ with concentrated HCl and filtrations through asbestos and distillation at 135°. In manures containing sulphates this method often gives too low values in the elimination of sulphuric acid with $BaCl_2$. Better results are obtained in separating with CaO . A proposal was also made to separate with Anilinperchlorate in alcoholic solution. The test with Cobalt nitrite after Gilbert and Hamberger is of an extraordinary importance. The test consists of a solution A: 50 gr. $CoNO_4$ in 100 ccm. water with 25 ccm. glacial acetic acid; and a solution B: 50 gr. $NaNO_2$ in 100 ccm. water. About 6 vol. of A are mixed with 10 vol. of B, 5-6 hours before using. For 5.5 ccm. of liquid are used 1.5 ccm. of the reagent, which fully separates O.20 g K. If a centrifugal with a calibrated glass is employed one scale mark indicates 0.000074 g of K, not one of the various titri-metric methods has an advantage over this method, because its only disadvantage is in the long time of 16 hours—a disadvantage they fully share with the last-mentioned method.

FEATURES OF SOAP MATERIAL MARKET.

(Continued from next page.)

from the Gold Coast. A firm market is noted on peanut oil, but business is going through at unchanged prices.

Heavy Chemicals.

The greatest interest in the heavy chemical situation during the interval under review has centred in the steadily declining trend of caustic soda. There has been a slump in this product amounting to from \$1.75@2 a hundred pounds with offers now noted down to a basis of \$4@4.25 a hundred pounds. The market for ground caustic soda as well as for soda ash have been slipping in sympathy with the market on 76 per cent. solid caustic soda and the trade feels that much of the weakness was due to the failure of a prominent speculative concern.

While trading in the general list of heavy chemicals has not reached the proportions customary in months past, consumers have been in the market for jobbing quantities of most materials from time to time and this has created a healthy undercurrent. Only limited offers of caustic potash 88 to 92 per cent. are now coming out and in some quarters 83@85 is now the going quotation. The situation in sulphuric acid is said to be less strained than in some weeks and 60 degrees material in sellers tanks at works is held on the basis of \$25@30.

BRITISH EXPORT EMBARGO CHANGES.

Further changes in the British embargo list have been reported by Consul General Skinner at London by cable of February 27. The symbols used to denote the class of prohibition are the following: (A) signifying prohibition to all destinations; (B) prohibition to all destinations except British possessions and protectorates; (C) prohibition to all countries in Europe and on the Mediterranean and Black Seas except France, Russia, Italy, Spain and Portugal.

The additions to the list are as follows:

(A) Soap, including soft soap.

The additions above are, with one exception, changes in the classification of the following former items which are accordingly removed:

(A) Soap containing above 1 per cent. of glycerine.

(B) Soft soap containing 1 per cent. or less of glycerine.

(C) Soap (except soft soap) containing 1 per cent. or less of glycerine.

SOAP COMPANY FACES CHARGES.

The Federal Trade Commission has issued a formal complaint against the Warren Soap Manufacturing Company of Boston, Mass., alleging that it has attempted to stifle and suppress competition in the manufacture and sale of soap and kindred products by secretly paying large sums of money to employees of its customers, prospective customers and competitors' customers to influence the purchase of the respondent's products, and to refrain from buying similar products of competitors.

Awards on Soap Powder and Cleanser Made.

The following awards have been made by the quartermaster, U. S. Marine Corps, Washington, D. C., for furnishing soap powder and cleanser under bids opened February 20 at Philadelphia:—Oakley Chemical Co., New York City, 5,000 pounds cleanser, \$740. The Fels Co., Philadelphia, Pa., 30,000 pounds soap powder, \$1,350.

Will Seek New Uses for Rosin.

Senator Park Trammell of Florida has secured an amendment to the agricultural appropriation bill in the Senate making the \$10,000 available for naval stores and educational uses extended so that investigations may be made by the Bureau of Chemistry to find new uses for turpentine and rosin.

Features to Be Found on Other Pages.

Readers of the SOAP SECTION may find items of interest to them in our Trade Notes pages, as well as in Patents and Trade Marks and Foreign Correspondence.

NEW SOURCES OF OIL.

(Continued from page 25.)

The rare occurrence in Germany, especially in the north, of the ash tree, made a gathering of its seeds, whose oil yield is only about 5%, also useless.

The seeds of the stone-pine can yield by extraction about 21% fat. The proportion of cone to seed, however, is the most unfavorable; 1 hectoliter of pine cone yields only about 0.7-0.8 kg. of cleaned, stone-pine seeds. Further, the harvest of the small cones is comparatively more dangerous than that of the fir cones, so that with the steadily increasing shortages in labor, a harvesting of greater quantities of stone-pine seeds seems to be excluded. The same considerations induced the War Committee to exclude the other seeds named by the writers of the article in question. The utilization of asparagus seeds for the production of oil was not considered in view of the great feed value of the cut and ground-up whole asparagus fruits, and also in view of the great difficulty of separating the oil-containing kernel from the hull and the fruit flesh. Their preparation for feed purposes had hence been taken over fully and entirely by the Union of German Agriculturalists.

The view of the authors: that their new investigations with tile (lime) tree seeds would prove that we possess in the tile (lime) tree a new and valuable source of oil, which even in peace-time could not be ignored, is not shared by the War Committee. The extraction made by the authors gave 11.65% of oil in 763 kg. of tile (lime) fruits. According to their report the fruits used in the experiments consisted partly of fruits shaken from the trees by means of poles and caught in sheets spread out below, and partly of fruits gathered on streets and places by sweeping. The latter were moist and musty, being mixed with leaves, parts of twigs and other dirt. We have already pointed out on a former occasion that by gathering in such ways dirt and waste have to be taken into account. In harvesting the seeds of the tile (lime) tree the proportion is so unfavorable that the result of oil extracted could be regarded as a failure, considering the data given by literature and previous laboratory experiments. In the experiments made by the War Committee with large quantities of lime (tile) fruits, 10,200 kgs. were treated. It is clear that the dirt and the amount of empty and unripe fruits in those quantities was in percentage considerably higher than in the test cited with only 763 kgs. of fruit—especially as under present conditions the harvesting will have to be done principally by sweeping and not by shaking the fruit on to sheets spread below. The yield of 11.65% of oil permits the assumption that the raw material subjected to extraction was composed principally of the thin-hulled fruit, rich in oil of *Tilia parvifolia*.

The writers of the article in question, as a result of their investigations, come to the conclusion that there is no reason at the present why all and any seed, not otherwise used, should not be gathered and treated for oil. Indifferent to the use of one kind of seed or of a mixture of seeds.

This view is certainly correct, in so far as only the treatment by means of extraction is considered. But it must be pointed out that the total yield in oil is unfavorably influenced by the presence of quantities of poor-oil carriers in the total gathered mass of various plant seeds; further, that the presence of poisonous seed, as e. g. of brown and laburnum, which contain sparteine and skoperine in not insignificant quantities, would cause the oil thus gained to be usable only for technical purposes and would make the residue unfit to serve as feed.

Hence the War Committee is of the opinion that only an organization which, with a clear defined purpose, will gather those plant seeds which only after careful examination, have been found to be of value for our oil balance, and whose residues are suitable for the preparation of food- and feed-stuffs, will be able to render good and valuable service to the public. Any other method would only mean an inefficient splitting up of our working and gathering forces, a matter which today has to be avoided by all means.

MARKET REVIEW ON TALLOW, ETC.

(Specially written for this journal.)

TALLOW.

After the recent decline to 17 cents for the New York special grade, the market remained steady with considerable trading for country goods based upon this price; and large purchases exhausted available supplies, so that several large soap manufacturers, desiring to continue purchasing, found it necessary to bid up; hence to-day sales of 700 drums New York Special Tallow were made at 17½ cents, an advance of ¼ cent a pound.

The underlying situation for fats generally is firm. While the war continues, and our Government is compelled to make large purchases of munitions, etc., into the manufacture of which considerable quantities of fat stocks of various kinds enter, it is needless to look forward to any decided decline in prices.

For the next few months we may also look forward to smaller arrivals of foreign fat stocks, as offerings from South America are fewer, and will result in more competition for available supplies produced in this country, which would seem bound to not only maintain prices, but in all likelihood to advance them.

On the present basis, tallow is still 1½—1¾ cents a pound lower than its highest point reached last year, while total production had diminished owing to the greater economy practiced all over the country, causing smaller consumption of beef, besides the larger shipments of meat to Europe will in themselves lessen the amount of raw fat available for the production of tallow in this country and add an additional factor for sustaining values.

Predictions come from well informed quarters that the high water mark of prices will be surpassed this year, and there appear to be logical grounds for the opinion.

TOBIAS T. PERGAMENT.

New York, March 19, 1918.

GLYCERINE.

Specially written for this journal by W. A. Stopford.

There has been considerable improvement in the demand for Dynamite Glycerine, and in consequence the price of all grades has advanced smartly. Dynamite has sold as high as 66½ cents for spot and nearby, and at 66 cents for the balance of this six months, and is firm at that figure today. The minimum quotation for Chemically Pure, in the East, is 67 cents, in bulk, while some makers are asking 68 cents; in the West, it is said, that lower figures are being named. Crude Glycerine has advanced 1½ to 2 cents per pound. Consumers of Chemically Pure have shown more interest in forward deliveries, and transactions, well ahead, have taken place. The result of the investigation now being carried on by the Government to ascertain the extent of the production and consumption of glycerine, and the nature of the different uses to which it is put, is being awaited with interest. It is thought that this action may indicate control by the Federal authorities. In view of the fact that the greater part of the production up to June 30, and considerable up to December 31, has already

been sold, it is reasonable to expect the market to at least retain its present position, and there is a chance of export business in Dynamite, which might advance prices materially. There will, however, undoubtedly come times when trading will lag and quotations drop temporarily.

Vegetable Oils.

There has been a further hardening of spot prices throughout the vegetable oil markets owing to shortages of stock and the inability of handlers to replenish promptly due to the transportation situation. This applies specifically on goods moving from Pacific Coast ports.

Offers of soya bean oil for spot and nearby have been quite limited and futures have ruled firm under a good inquiry. The advancing tendency of linseed has brought out good demand for soya bean oil from the paint trade and it looks as though a level of 17 cents a pound would be maintained on the latter for some time.

The demand for cocoanut oil has fallen off somewhat, but there is no disposition on the part of large handlers to come down in their views. Ceylon and Cochin varieties rule firm to steady as the arrivals at Seattle and San Francisco have been rather large and this has developed some unsettlement on the Pacific Coast due to the competition from Japanese importers.

A topic of lively interest during the interval was the formation by the Olive Oil Trade of an Association having for its object the raising of existing embargoes against olive oil shipments from Italy and Spain which have been operative for so long a time in keeping stocks out of this market. The Association plans to co-operate with the War Trade Board in the effort to remove the embargoes which have been incidental in lifting the price of de-natured olive oil to the high record figure of \$3.10 a gallon.

Corn oil is moving freely but the material is being taken almost entirely by the edible trade. Offers of palm oil of all kinds have been quite limited and prices are now entirely nominal. There is an absolute embargo on this material

(Continued on preceding page.)

SOAP MATERIALS.

Glycerine, C. P., 67@68c.

Dynamite, 66c.

Crude, soap lye, 80 per cent loose, 46½@47c.

Saponification, 80 per cent loose, 52c.

Castor Oil, No. 3, 29@35c., nominal.

Cocoanut, Cochin, nom.; Ceylon, nominal.

Cocoanut oil, domestic Cochin, 19@19½c.; domestic

Ceylon, 18@18½c.

Corn, crude, 18.75c., nominal.

Cottonseed, crude, tanks, 17½c. lb.; refined, 20.00@20.25c.

lb.

Olive, denatured, \$3.15@3.20 gal.; prime foots, 38@39c. per lb.

Palm, Lagos, 34@34½c., nominal; red prime, 31@32c.

Palm kernel oil, domestic, 18@18½c., nominal.

Peanut, crude, \$1.36@1.37 gal. f. o. b. mill.

Soya bean, 19½@19½c., nominal.

Tallow, special loose, New York, 17½c. asked; tallow city, 16½c. asked; grease, yellow, 16@16½c., brown, 15% @16c.

Chemicals, etc., Borax Crystals and granular, 8@8½c.

Caustic potash, 88 to 92 per cent, 85@90c.

Caustic soda, 76 per cent, \$4@4.25 per 100 pounds.

Carbonate potash, calcined, 80 to 85 per cent, 45@50c.

Red oil, saponification, 17@17½c.

Salt, common, fine, \$1.08@2.10.

Soda ash, 58 per cent, \$2.75@2.80 per 100 lbs.

Soda silicate, "iron free," 4½@4½c.

Sulphuric acid, 60 degrees, \$25@30 per ton.

Starch, pearl, \$6.30@6.38; powdered, \$6.34@6.37.

Stearic acid, single pressed, 23½c.

Stearic acid, double pressed, 24½@26c.

Stearic acid, triple pressed, 27c.

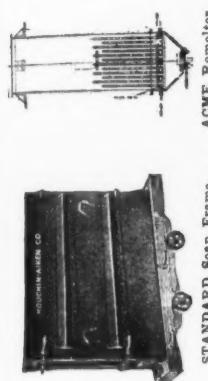
Zinc, oxide, American, 12@15c.

Rosin, water white, \$8.30@8.55 per barrel.

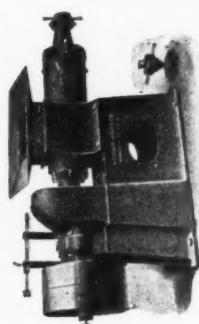
Rosin, window glass, \$8.10@8.25 per barrel.

Rosin, Nancy, \$7.90@8.15 per barrel.

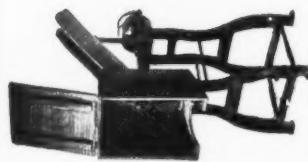
Rosin, Mary, \$7.65@7.90 per barrel.



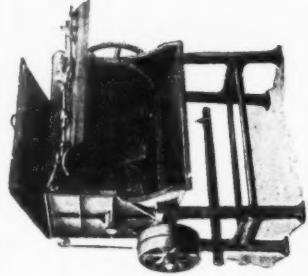
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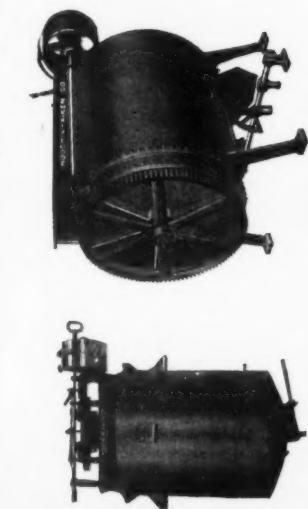
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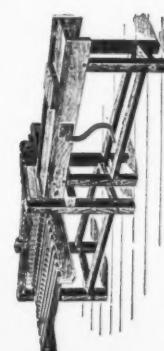
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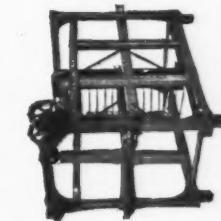
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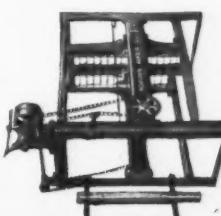
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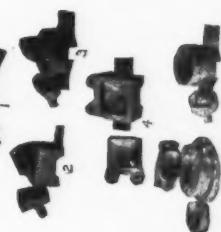
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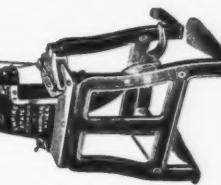
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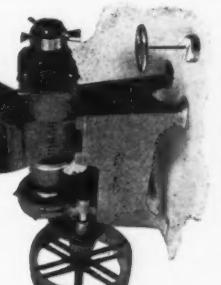
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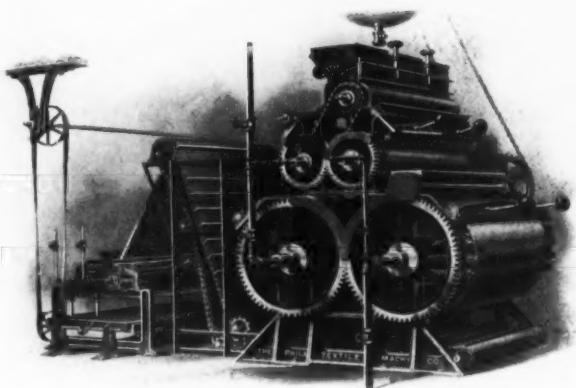


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(Continued on page 54.)



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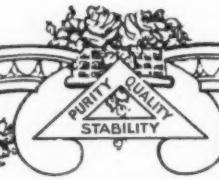
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Neroli

Wolmark Chemical Company

31 West 14th Street, New York City

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A. B. C. 5th Edition

Sole Agents for U. S. A. and Canada for Societe des Parfums Naturels de Sicile,
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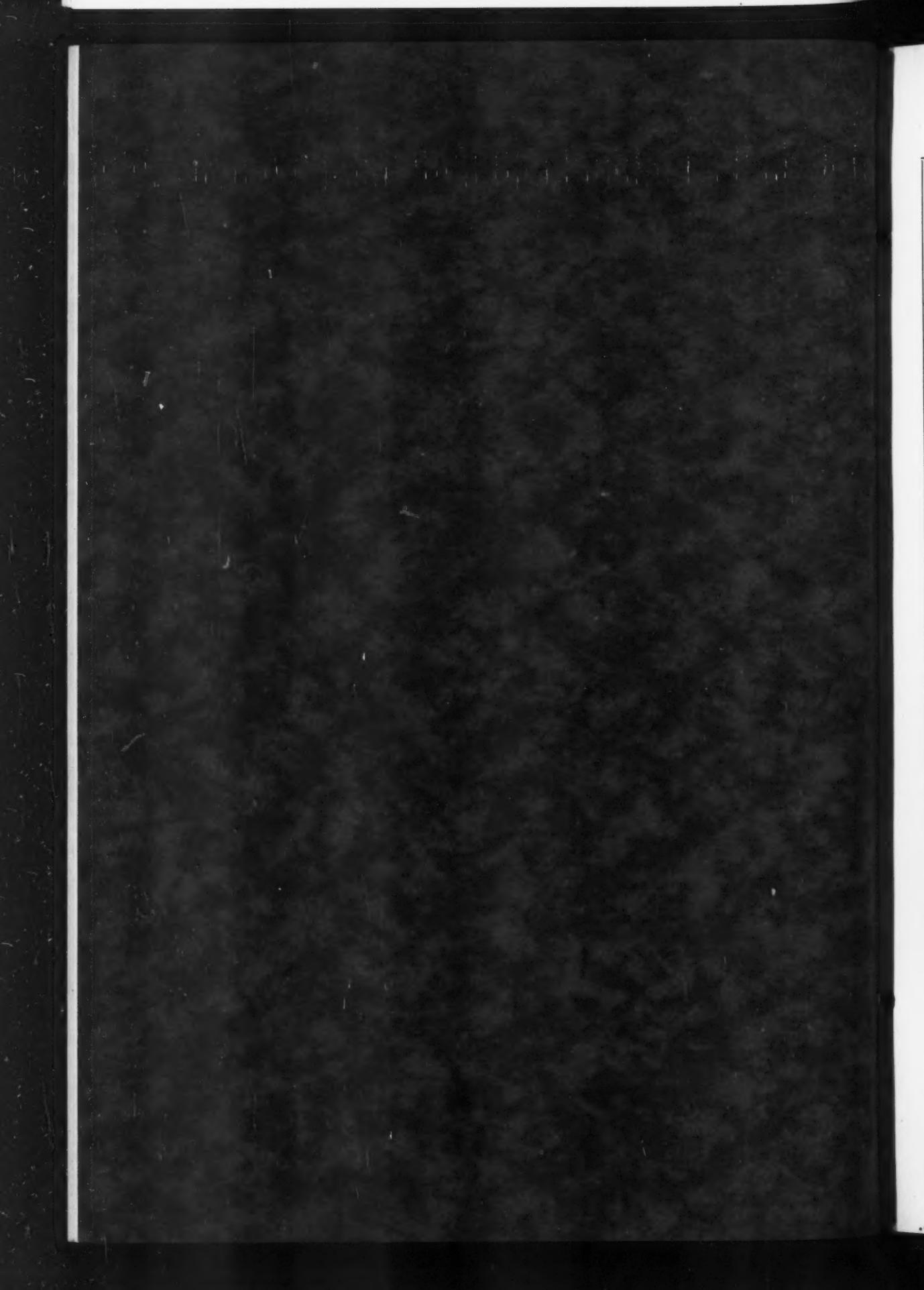


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WESTERN REPRESENTATIVE
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PERFECT GLASS SPRINKLER

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WE REASON THAT:—

The extra efforts we are making now in the interest of our trade are going to bear fruit in the days to come.

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Boxes of All Kinds for the Toilet Preparations Trade

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Full Size Samples Sent Upon Request

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COLLAPSIBLE TUBES

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LITHOGRAPHED TIN BOXES
OF HIGH QUALITY

OVAL TALCUMS A SPECIALTY

PROMPT DELIVERIES GUARANTEED

We are now prepared to quote on your requirements,
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COLD CREAM OIL

In several grades

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(Ten times stronger than Musk Artificial.)

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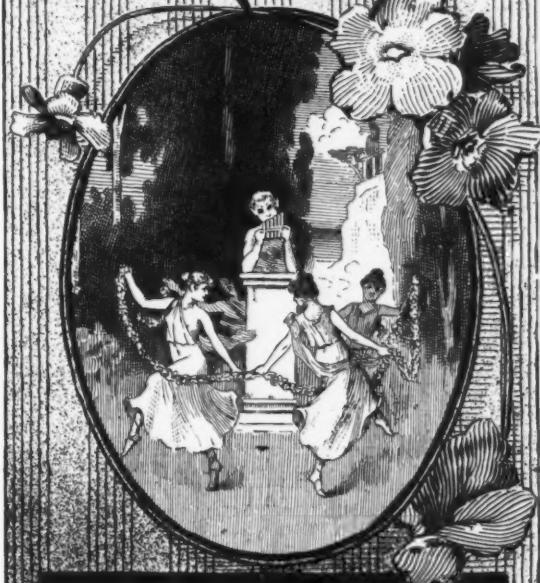
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Individuality for YOUR Packing

THE J. B. Williams Co. is only one of the many manufacturers of high-class products who realize that Heminway's Package Silk gives to finished products the final touch of quality that makes them really ready for display. Distinctive packings help attract and hold a better trade.

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Successors to
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EXTRA STRENGTH SYNTHETICS

Without Sacrifice of Quality

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A reasonably priced article of guaranteed uniformity

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A product of strength and delicate sweetness.

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ESTABLISHED 1874

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OF EVERY DESCRIPTION
OUR SPECIALTY

GRAND & FLORENCE STS.

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The 1st of May Thrift Stamp Day In the U. S. A.

The Active Co-operation of Every Reader of
The American Perfumer & Essential Oil Review

Is Urgently Requested To Make It A Success

May 1st, 1918, will be observed throughout the United States as Thrift Stamp Day! On that day retail stores everywhere in every line of business will ask customers to take part of their change in Thrift Stamps! It will be patriotic for every man, woman and child to accept at least one Thrift Stamp as change on every purchase made that day—and to make as many purchases as possible on May 1st.

Here is a big, practical way of getting millions of Thrift Stamps into the hands of the people of the United States, and of insuring the success of the Government's War Savings Stamps campaign. Thrift Stamp Day will help everyone. It will prove a tremendous boost to business. On May 1st, 1918, the nation should do the biggest total retail business of any single day in our history! The beneficial habit of Thrift

will be sown broadcast among the citizens of the U. S. A. Most important of all, Uncle Sam will be furnished with the sinews of War and Victory!

American business must go "over the top" at once in a quick drive to make Thrift Stamp Day an overwhelming success. You wholesalers, you jobbers, you salesmen, must talk Thrift Stamp Day among your trade, arouse the enthusiasm of the retailers, the store-keepers, the clerks behind the counters. Uncle Sam needs your help. A practical plan has been prepared showing how each one of you can "do your bit" to make Thrift Stamp Day a red letter day in American business annals. Write for this plan today without fail. Remember, in helping Uncle Sam you are helping business and helping yourselves. Address Mr. W. Ward Smith, National War Savings Committee, 51 Chambers St., New York City.



National War Savings Committee

51 Chambers Street, New York City



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A large corporation located in New York City and also in the Central West will buy a GOING BUSINESS or machinery and apparatus such as the following: Sifters and Mixers, Bolting Machines, Steam-Jacketed Kettles, Filter Press, Pony Mixers, Dough Mixers, Gas Burning Steam Boiler, Collapsible Tube Filling and Closing Machines, Bottle Filling and Washing Apparatus, Conveyer Tables, Motors, Shafting and Pulleys, Tablet and General Pharmaceutical Machinery. Will pay cash for all purchases. Don't hesitate to answer if you only have one or more pieces of the above described apparatus. Communications held strictly confidential. Address, giving detailed description with lowest cash price,

Industrial
care of this journal

4 EXPERT SALESMEN ARE READY TO SELL YOUR PRODUCT

THIS going organization of practical salesmen is now open for a proposition from some high class perfumer or toilet article specialty manufacturer. The metropolitan district is its field, and these men know it like a book. An exceptional circumstance brings this company into the market for another product to put over. Have you anything worth while?

HUNTINGTON SALES CO.

TIMES BUILDING, N. Y.

We specialize in the manufacture of high-grade Shampoo Soaps for the toilet preparation trade.

Liquid Shampoo, Shampoo Paste, Shampoo Base, Liquid Toilet Soap

Many firms are using our Base Soap in making up their own solutions. It's a strictly pure, neutral, cocoanut oil, potash soap made expressly for liquid soap purposes.

We also make liquid Shampoo in 10 different brands and Shampoo Paste in 5 brands.

Write for samples and prices.

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Dayton, Ohio

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■ IMPORTÉ DE SUISSE ■



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 (ZINC STEARATE)

An improvement on all other Stearates. A wholesome, velvety improver for Talcum and Face Powders.

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 COLD CREAM NEUTRAL OIL

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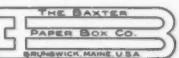
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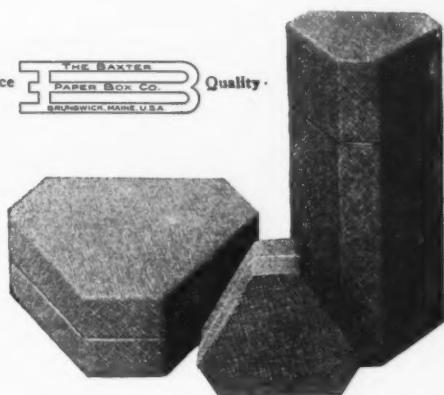
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"COLLAPSIBLE
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Plain and Decorated

Your present label reproduced directly on the Tube, or we will prepare new designs and submit for your approval.

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DECORATED TIN PACKAGES

ESPECIALLY FOR TALCUM, TOOTH
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REQUIRING THIS TYPE OF CONTAINER.

BUY SECURITY ALSO. A LARGE
AND WELL-EQUIPPED PLANT BACK
OF YOUR REQUIREMENTS FOR 1918.

The Tin Decorating Co.
Of Baltimore, Maryland

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**All grades of
VANILLA BEANS**
TONKA BEANS

GUMS
Arabic Tragacanth
Crude Powdered
POWDERED KARAYA GUM

PERFUMERS' and SOAP MAKERS' RAW MATERIALS and Synthetics

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A FULL LINE OF PHARMACEUTICAL AND HEAVY
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GUMMED EMBOSSED METAL SEALS MAKE YOUR PACKAGE LOOK THE PRICE

BY EMPLOYING only the highest skilled men in every department and by using only the very best of materials and the greatest care in workmanship, we have built up a reputation for making the most artistic and durable label made, and we realize our future growth and progress depend upon the artistic worth and durability of every label sent out. Let us submit new ideas, work out your own suggestions or improve your present labels.

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DAYTON, OHIO
SOLE PATENTEES AND MAKERS

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Before placing your orders for powder puffs of any description, ask us for quotations and samples.

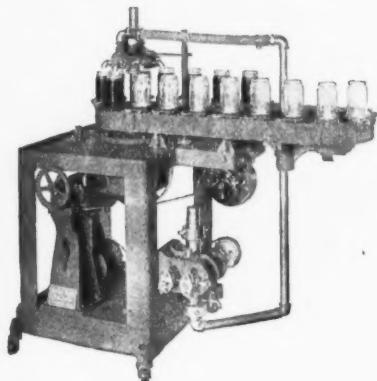
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There is no overflowing, spilling or loss of product.

IT SAVES 3 TO 5 OPERATORS.

The Visco enables you to turn out your government orders on time. Write for catalog.

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(Continued from page 36)

GENERAL OFFICE MAN familiar with drug trade credits and collections and office systems and routine. Must have first class modern business training and experience in the drug or perfumery business. Not over 30 years of age. Knowledge of accounting desirable. Salary to start, \$25.00 per week. Address H. W., No. 518, care of this journal.

SALESMAN to call on drug and department store trade in South and Middle West for nationally advertised toilet preparations. Must be prepared to make long trips. First class opportunity to the right man. State fully your experience and salary expected. Address H. W., No. 519, care of this journal.

LOCAL SALESMAN for advertised toilet preparations to call on druggists and department stores in vicinity of New York with occasional trips through Eastern States. Only first class men with high grade experience considered. State fully age, experience, references, salary desired. Address H. W., 520, care of this journal.

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FACE POWDERS

of finest texture, great
adhesiveness and
Flowery Perfume

IN BULK

Your odor if desired.

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Natural and Synthetic Products

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High Grade Stearines

—Dept. "D"—

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DUVAL**

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Oil Red Rose
\$32.00 per lb.
Will compare favorably with the French
Otto Rose

Oil Lily of the Valley Duval
\$32.00 per lb.
Most wonderful reproduction of the true Lily
of the Valley odor.
For Perfumes 8 ozs. to Gallon
For Toilet Waters $\frac{1}{2}$ oz. to Gallon

Lilac V. Duval
1 lb. \$24.00
Delightfully fragrant and reminding you of
the fresh Lilac Flowers
Soap Perfume Oils for Toilet and Household
Soaps. From 45c a lb. up.



We have originated many of
the best boxes in use

among which are the popular

Snap Button Paper Boxes
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Our finest types of Boxes are unsurpassed by foreign makes.
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Incorporated 1903
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COMPACT
Rouge Machinery

PATENTED

Makes Compacts that look like hand-
made by the simplest method directly
onto glass or porcelain base or in
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SOLD OR RENTED

Manufacturing Formulae Furnished

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The Oxzyn Company has always carefully tested
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free from mercury, lead or other poisonous
materials.

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Makers of Oxzyn Preparations.

PHILIP MUNTER COMPANY

Sole Manufacturers of

**FRENCH PROCESS ROUGE AND
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Eyebrow Pencils, Lip Sticks,
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Buy Direct of the

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MANUFACTURERS

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GOOD ODORS

sell

Toilet Preparations

We sell THE BEST lines of

BLENDED OILS

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Best Values

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for you 50% Spirits?Write for our complete lists, and Booklet of
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ESTABLISHED 1898

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(A product that exemplifies its name)

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(Absolutely pure)

RAJAH BRAND HENNA

(A superior article)

RAJAH ALMOND MEAL
(A toilet requisite)

RAJAH BRAND RICE FLOUR AND STARCH
(Two products gaining lasting favor)

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WHITE MINERAL JELLY

For cold cream, camphor ice, beauty cake, etc.

SELECT CREAM OIL

For cold cream. Stands tests for low acidity and carbonizable matter.

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All grades.

PURIFIED**PETROLATUM OIL**

Medicinal—white, odorless and tasteless.

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A cocoanut oil base for liquid soap and shampoo. Complete formula for the asking.

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Goods well-wrapped are already half sold. Customers appreciate careful packing. They realize that the same care that is given to their wrapping has undoubtedly been given to their manufacture. It's a big selling point.

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From raw material to finished product the manufacturer is under the careful supervision of paper experts. Pure spring water only is used in making Diamond-F Protective Papers.

Ask your jobber about Diamond-F Protective Papers. Or write direct to us.



*A Mark of Quality—
A Sign of Service*

Diamond State Fibre Co., Bridgeport, Pa. (Near Phila.)

**LET US SUPPLY YOU IN
BULK, OR IN PACKAGES
UNDER YOUR OWN LABEL**

Concentrated Food Flavors, Food Colors, Sachet Powder, Hair Tonic, Massage-, Cold-, Dental-, Shaving- and Vanishing-Creams, Ink Tablets, Foot Powder, Shampoo Powder, Corn Treatment, Iron Rust and Stain Remover, Baking Powder, Face Powder, Talcum Powder, Soft Drink Flavors, Perfumes, Egg Saver, Silver Polish, Medicinal Tablets, etc.

We supply many of the largest users in the country and should appreciate the opportunity of demonstrating what we can do for you. Tell us what you want and let us quote. Samples free to responsible parties.

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which possesses in a marked degree the peculiar and valuable property of uniting and harmonizing odoriferous materials, and does it economically and in an unusually short time.

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TONOL tones, unites, fixes, enhances and characterizes all odors.

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JAMES A. WEBB & SON

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NEW YORK

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